Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

December 14, 1959

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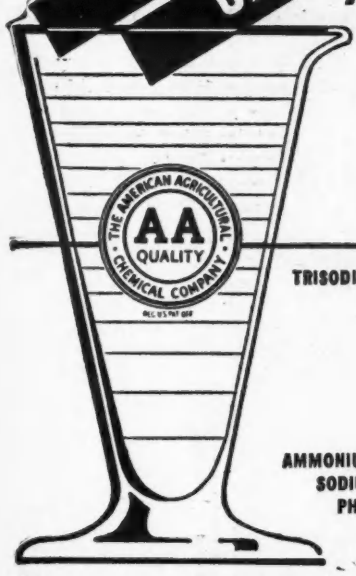

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Oil, Paint and Drug Reporter

Vol. 176 No. 25 30 Church St., New York 7, N.Y. December 14, 1959

Sen. Kefauver Shows His Hand; Now Publicity-Battered Drug Men Get Ready to Tell 'Whole Story'

Unreasonable price spreads between bulk and finished products . . . Questionable cross-licensing arrangements among manufacturers . . . Excessive promotional activity by the big drug houses . . . Small producers prevented from obtaining a fair share of the market.

These headline-gathering charges, dropped expertly by the press-conscious Kefauver anti-monopoly committee at its drug hearing last week, limn the pattern of the assault on the pharmaceutical industry in the months ahead.

The industry is battered and scarred publicity-wise by "revelations" turned up by committee probers during the first week of testimony. But drug executives are patiently awaiting their turn to tell "the whole story" of the industry's contribution to the advancement of public health—probably in January.

They do not believe the industry has suffered such great damage to its integrity that it cannot recover. Their confidence in their ultimate vindication rose as the hearings proceeded during the week.

While the Kefauver committee drew first blood by the first day's sensational accusations of staggering profits aggregating 1,118 percent by one firm (Schering Corporation) on sales of the synthetic hormone prednisolone, it was evident as the hearings moved along that this "revelation" was based more on fiction than on fact.

Probably the most damaging of the committee's probing had to do with the cross-licensing arrangements entered into by Schering with other big corticosteroid firms for marketing of prednisolone in "specialty form

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Francis C. Brown

Schering Head Slams Charge of Profiteering

Francis C. Brown, president of Schering Corporation, last week vigorously denied charges that his firm was profiteering in medicines or violated the antitrust laws in its agreements with other producers of corticosteroids, prednisone and predinolone.

Mr. Brown was the first of the industry witnesses to be put on the firing line by the Kefauver committee in its long-heralded investigation of drug prices. He accused the committee of painting a picture of his firm's pricing policies with "gross mis-statements of fact" that were not only "seriously damaging" to Schering but "I think to industry as a whole."

Two Days of Headline-Getting

Mr. Brown's accusation came at the close of nearly two days of hearings which featured headline-getting charges by Sen. Estes Kefauver of Tennessee, chairman, and his committee aides.

Accusations that Schering had made profits of 1,118 percent on its sales of prednisolone to druggists were deflated if not completely punctured the next day by other committee aides and Mr. Brown who showed that the profits were 12.3 percent.

Th 1,118 profit charge was based on a committee exhibit showing Schering had purchased prednisolone from Upjohn Company at a cost of $1.57 per 100 tablets, which it sold to druggists for $17.90 per 100 after bottling and packaging.

The fact was not brought out until twenty-four hours later—after the 1,118 percent figure had captured the newspaper headlines—that ignored in the computation was the costs of selling, distributing and research which should have been figured in to arrive at the profit margin.

The Bloomfield, N.J., executive engaged in a heated exchange with the chairman and the two committee investigators, Dr. John Blair, economist, and Paul Rand Dixon, counsel, over the 1,118 percent figure, insisting that consideration had to be given other cost factors in addition to the cost of the drug itself. But it was not until the next day that these factors were

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Drug Trade Probed Anew; This Time It's Tranquilizers

The drug industry, as if it doesn't have enough problems with the government already, is now beset by a federal grand jury in New York. This time it's an investigation regarding manufacture and sale of tranquilizers.

The jury is probing for possible violations of the antitrust laws. Prior to getting the problem before the jury, the Justice department's antitrust division reports, senators and representatives were bombarded with complaints by their constituents. This is what triggered the investigation.

Drug Firms Like Gaul Divided in Three Parts

Like Julius Caesar's Gaul, the drug industry is divided into three parts. That's what John T. Connor, president of Merck & Co., Rahway, N.J., told the Kefauver anti-monopoly committee last week.

First, Mr. Connor said, there are the "creators" such as Merck who spend huge sums to develop new drugs. Then there are the "molecule manipulators," firms which "don't knock home runs first" but capitalize on the efforts of others. Finally, he said, there are the "coattail riders" who "neither sow nor reap, but the Lord seems to take care of them anyway."

Schering Cuts Drug Again

Schering Corporation, Bloomfield, N. J., has reduced prices of "Fulvicin," its new anti-fungal antibiotic, by 15 percent. The move comes on the heels of a 20 percent price reduction posted three weeks ago (OPD, 11/23/59). Schering says it has made the price reduction to bring the product within the financial range of patients requiring prolonged treatment.

Delaney Clause Called Too Broad; Flemming Wishes to See It Limited

The scope of the Delaney cancer amendment to the food additives law does not please Arthur S. Flemming, Secretary of Health, Education & Welfare. Mr. Flemming believes it may be too broad and should be limited in its application. He also dislikes the "grandfather clause" in the law that permit continued use of additives in food products because of prior approval. Such things, he adds, should be revised. Mr. Flemming made his feelings known at a special news conference he called late last week.

At the conference he disclosed that a voluntary agreement had been reached by the poultry industry and the stilbestrol manufacturers. Under the agreement, sale and use of the drug for treatment of poultry for the market will be discontinued immediately.

Retail Sales Also Will Be Stopped

Retail food dealers have also promised to discontinue sale of the treated birds to consumers, Mr. Flemming disclosed.

The HEW Secretary directed his criticism over the scope of the Delaney clause at the prohibition it places on the use of a carcinogen on food or feed, even if there is no residue left in the food portion of the end-product.

He said that it has raised a question in his mind whether the Delaney clause does not go too far in such cases.

His objection to the "grandfather" clause stems from the fact that in administering the food additives law he has been forced to deny clearance to new applications for use of stilbestrol in animal feeds while permitting the continued sale of feeds containing the drug because they have a prior license under new drug law applications.

While he did not state flatly that he plans to ask congress to change the law on both counts, he strongly implied that he is giving serious consideration to

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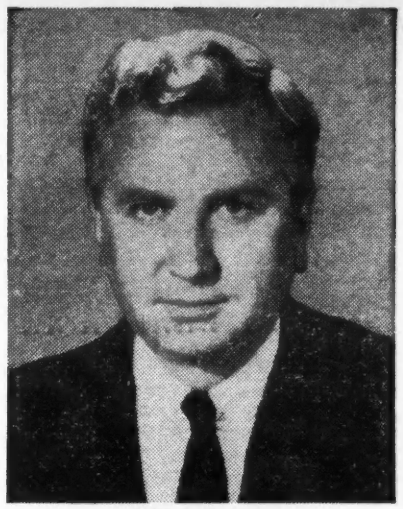

John T. Connor

Connor to Kefauver: Take a Closer Look

If the Kefauver probers will just bother to take a good, close look at corticosteroids, they will find the products are being made by a drug industry that is highly competitive, free of excessive concentration and always ready to produce more and more medical products at better prices.

Such was the defense of John T. Connor, president of Merck & Co., last week to the charges and innuendoes that came as the Kefauver anti-monopoly committee continued prying into the American drug industry.

Old Charge of Profiteering, etc.

Burden of the charges was that the big producers of corticosteroids are profiteering in the drugs, preventing small companies from entering the market and selling their products abroad at prices below those in this country.

The Rahway, N. J., executive stressed to the committee that the investigation is a serious one for his company because of presumptions being raised in the public minds that could be damaging to Merck. He also cautioned the investigators to take care that they not slow the forward march of the pharmaceutical industry towards the eventual cure of arthritis.

He accused the committee of using "mythical" companies for price comparisons and challenged the group to summon the doctors to testify as to why they prefer the Merck products over some lower-priced drugs.

Mr. Connor also informed the committee that after introducing cortisone for the treatment of arthritis in 1949, Merck voluntarily reduced the price 90 percent in three years.

"At no time since the first sale in 1949 have we raised the price of our steriod products," he declared.

The issue of reasonableness of prices was raised by Dr. John Blair, committee economist, who produced a chart showing that in 1958 prednisone could be purchased at a computed cost of $13.61, exclusive of selling and distribution costs

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Chemical Spending in '60 Hearkens Back Two Years

The economic tide that is moving business generally to plan larger capital expenditures next year is engulfing the chemical industry.

Reports to the government indicate that chemical producers intend to lay out far more money during the upcoming quarter than for any three-month period this year.

In fact, if the trend continues through the entire year, '60 will be the chemical industry's biggest expansion year since 1957.

Chemical firms aim to spend $324 mil-

—Continued on page 58

FDA to Take Hard Line on Bids for More Time to Clear Food Additives

If producers of food additives are looking for more time to gather safety evidence to support clearance petitions under the new additives law, they'd better start making applications to the Food & Drug Administration right now.

Officials are going to take a hard line on requests for extensions beyond March 6, the date the law becomes effective. If there are any questions of public health involved, such requests may be refused point blank.

This advice comes from Secretary of Health, Education & Welfare Arthur S. Flemming who noted last week that, with the deadline less than four months away, only fifty-five petitions for clearance of food additives have been received.

Of these fifty-five, Mr. Flemming commented, only nineteen are sufficiently complete to warrant a formal filing—that is, to start the clock running on clearance action. A mere five additives have been cleared under the new law to date. About 1,000 additives are used in food processing, it is estimated.

Mr. Flemming stated that the law provides that he may grant an additional twelve months for final clearance of additives where the extra time "involves no undue risk to the public health and conditions exist which necessitate the prescribing of such an additional period."

He said that he would consider requests for extension of time "strictly on the basis of public health considerations." He emphasized that any reasonable doubts will be involved in favor of public health considerations.

A detailed statement of the conditions for obtaining an extension of the clearance deadline date will be published soon in the *Federal Register*.

However, Mr. Flemming indicated that in general he would have to know the following, among other things:

- The name and chemical composition of the food additive for which the extension is requested.
- The uses for which the extension is requested and what the intended physical

—Continued on page 41

Chemical Sales Seen Rocketing 9 Percent During Coming Year

Chemical sales may rocket to a new high of $27 billion in 1960, about 9 percent better than the $24.8 billion now estimated for 1959. This jet-like surge is happily forecast by the chemical and rubber division of Businesss & Defense Services Administration. The agency thinks that many chemicals will hit new production peaks next year and this, it says, will be accompanied by a marked stiffening in competition. Foreign trade in chemicals is also expected to climb in the coming year.

Getting down to cases, BDSA believes that output of sulfuric acid may top 18 million tons, about 4 percent over 1959. It feels that competition in the domestic sulfur market will be very keen between producers and importers, as production and consumption increase at continuing low prices.

Domestic demand for alkalis and chlorine, the agency says, will hike output at least 5 percent above this year's level. Exports of caustic soda and soda ash, however, are likely to fall off slightly as several new foreign plants come on stream.

HF Output Seen up 10 Percent

Production of hydrofluoric acid is seen rising to 110,000 short tons, approximately 10 percent higher than 1959.

BDSA is also bullish about sodium sulfate production, especially from natural sources, rayon, sodium bichromate, boric acid and phenol. However, it looks for a corresponding decline in sulfate output from salt and acid facilities.

Oxygen and argon, it says, should reach new production heights—10 percent above 1959—assuming uninterrupted steel production.

The agency views the pesticides outlook as "encouraging." During the current fiscal year, it reports, International Cooperation Administration expects to procure about 60 million pounds of 75 percent DDT and 100,000 pounds of 75 percent dieldrin for use in the malaria eradication program.

[General Services Administration has already awarded contracts on 47.75 million pounds of DDT (OPD, 11/30/59). When it announced the awards last month, GSA said it was buying all the DDT it had money for.]

BDSA reports a feeling of optimism among copper sulfate producers, adding that it is generally felt that the trade will continue to recapture part of the Latin American market.

Producers of cotton pesticides, the agency notes, foresee another good year. Supporting this is the Department of Agriculture announcement that the national acre allotment for cotton will again be at 16 million.

Turning to fertilizers, BDSA feels that the 1959 decline in farm income may depress 1960 sales in some areas. On the

—*Continued on page 59*

Steel Situation Easing? Here's One Good Sign

First sign that chemical makers have stopped beating the bushes for used drums appears in an announcement by Emery Industries, Inc., withdrawing its October 13 offer to re-purchase lined bung-type drums.

The re-purchase offer came during the steel strike when output was running something like 10 percent of capacity. With production passing 90 percent now, it's expected that all chemical makers will soon be packing their wares in new drums.

Aluminum Trialkyls: Product of New Plant

Texas Alkyls, Inc., is happily giving out the news that it has just brought on stream the first US plant for commercial production of aluminum trialkyls via the Ziegler process. Located on the Houston (Tex.) Ship Channel, the facility is reported to have a capacity of 2 million pounds of aluminum trialkyls yearly. This is double the unit's original planned capacity—a result of process improvements incorporated in the design, Texas Alkyls reports.

Production of triethyl aluminum and tri-isobutyl aluminum is already under way. Scheduled for start-up early next year is output of ethyl aluminum sesquichloride, diethyl aluminum chloride, other alkyl aluminum hydrides and chlorides, and higher (C_6, C_8, C_{10}) aluminum trialkyls.

Eastman Posts Price Hike On Dispersed Textile Dyes

Eastman Chemical Products, Inc., a subsidiary of Eastman Kodak Company, New York, has posted price increases on ten of its dispersed dyes for synthetic textile fibers, effective January 1.

Increases will range from 4 cents a pound for rubine R to 29 cents a pound for yellow 5G, concentrated. Other dyes affected are yellow GN, up 10 cents; orange GRN, up 14 cents; scarlet BG, up 9 cents, fast violet 5RLF, up 22 cents; black SN, up 8 cents; polyester diazo black B, up 7 cents; and blues GBN and BNN, both up 13 cents.

Coconut Oil Bids Sought

General Services Administration has asked bids returnable January 5, at 11 a.m., for purchase of 14 million pounds of coconut oil from the national stockpile. This is the first offering from the 265 million pounds of oil in the stockpile—which will be sold in lots of 10 to 14 million pounds each in six week periods.

The Week's Price Changes

Candelilla Wax, Linseed and Soybean Meals Advanced. Citral, Lemongrass and Orange Oils, Tankage Reduced.

Prices Advanced

Candelilla wax, crude, 5c. per lb. (p. 64).
Refd., 5c. per lb. (p. 64).
Coconut oil, crude, ⅜c. per lb. (p. 64).
Corn oil, crude, ⅜c. per lb. (p. 64).
Refd., ⅜c. per lb. (p. 64).
Linseed meal, $1 per ton (p. 64).
Oleo oil, ½c. per lb. (p. 64).
Soybean meal, $2 per ton (p. 64).
Tin (straits), metal, 1c. per lb. (p. 35).
Salts, ½c.-3/5c. per lb. (p. 35).

Prices Reduced

Citral, 10c. per lb. (p. 57).
Cottonseed oil foots, 95%, ½c. per lb (p. 64).
Cottonseed meal, $2 per ton (p. 64).
Lard, cash, ½c. per lb. (p. 64).
Lemongrass oil, 35c. per lb. (p. 57).
Orange oil, Fla., 2c. per lb. (p. 57).
Peanut oil, crude, ½c. per lb. (p. 64).
Refd., ½c. per lb. (p. 64).
Rice bran oil, ½c. per lb. (p. 64).
Soybean oil foots, 95%, ½c. per lb. (p. 64).
Tankage, N.Y. and Chicago, 25c. per unit-ton (p. 42).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

Dec. 11, 1959	Dec. 4, 1959	Dec. 12, 1958
111.67	111.54	110.61

Chemists: Here's Opportunity

The Pentagon is banking on the chemical industry to plug some of the chinks in the nation's technical defenses. Among the things it is looking for are a number of new adhesives, a method for densifying organic compounds, an anti-fogging plastic facepiece, ways to compound the newer synthetic rubbers, a chemical additive for jet fuel, new and better fungicides and improved insect repellents and insecticides for use by military personnel.

Defense department planners are seeking a new adhesive for explosives and a cement for bonding silicon solar cells to a metal or plastic base plate.

They would also like industry chemists to come up with an adhesive that can be used to join metal (steel, aluminum or alloys) together, one that will give the metals so joined a tensile strength of not less than 50,000 psi.

The military also needs an adhesive cement for joining seams of coated fabric tents. This would replace the present practice of stitching seams.

Here are some of the things it wants done in the field of chemical processing:

- A technique for compacting organic compounds, such as metadinitrobenzene, without altering their electrochemical characteristics.
- Development of methods for determining the cultural characteristics of

—*Continued on page 55*

ASSUMING TOP POST: Thomas C. Jones, set to become president of Nalco Chemical Company, Chicago, on January 1. Joseph A. Holmes, now president, will become vice-chairman of the board.

Mobay to Expand in TDI; Linde Starts Up On-Site Unit

Mobay Chemical Company, Pittsburgh, Pa., has just disclosed plans for a third major expansion of its isocyanate facilities at New Martinsville, Va.

The new expansion, slated for completion by July, 1960, will raise toluene diisocyanates (TDI) capacity to 25 million pounds per year. The chemical is a basic ingredient in urethane coatings.

In a related move, Linde Company, a division of Union Carbide Corporation, New York, has put on stream an on-site oxygen and nitrogen facility to serve Mobay's New Martinsville plant. The Linde unit is rated to produce twenty-five tons per day of medium purity oxygen and twenty-five tons of high purity dry oxygen.

Allied's Solvay Division Begins Dry Caustic Output

Allied Chemical Corporation is starting up production of flake caustic soda today (December 14) at the Perkins, W. Va., plant of its Solvay Process Division. Until today the plant's soda output had been confined to liquid form.

The flake material will be packed in 400-pound non-returnable drums and priced at $5.20 per hundredweight, the New York company says.

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MCA Leaping Boundaries

Manufacturing Chemists' Association from now on will know no boundaries when it comes to helping its members—at least, no national boundaries. MCA plans to transcend these mere lines on the map with an international operations committee that it has just formed.

The association points out that nearly half its member companies have interests abroad. Fifteen percent of their capital outlay this year, for instance, has been spent in other countries. Therefore, argues MCA, there is a big foreign field in which it can serve its members.

In announcing the formation of the new committee, MCA's president, John E. Hull, cautions chemical companies, however, that the foreign investment area requires careful consideration along such lines as political, social and economic influences.

But, after advising caution, he notes that overseas operations offer opportunity for chemical manufacturers to break into tariff-protected markets, to create outlets for raw materials and intermediates, and to create sources of materials that are in short supply in this country.

MCA's new committee will concern itself with problems generally coming within the scope of the international activities of US chemical companies, their subsidiaries and affiliates. Matters of domestic tariffs will continue to come under MCA's long-established international trade and tariffs committee.

Mr. Hull in fairness also points out that foreign trade carries with it a number of disadvantages, such as expropriation risk, currency exchange controls, import controls, quotas and foreign export boomerangs against the home market.

Committee members will be rank-

—Continued on page 66

Drug Business a Whipping Boy And Price Picture Is Distorted, Kefauver-Conscious PMA Hears

The drug business, unmercifully attacked in Washington by the Kefauver committee, found a strong champion in New York last week when Austin Smith, president of the Pharmaceutical Manufacturers' Association, declared that the industry has become a whipping boy and that the government is giving "a distorted picture of drug prices, production costs and drug company profits." Dr. Smith bluntly told his listeners at PMA's eastern regional meeting that the present hearings in Washington appear to be a "back door" attempt to bring about government-controlled medicine.

The speaker struck a telling blow for his industry when he pointed out that the wholesale price index of the Bureau of Labor Statistics for drugs, pharmaceuticals and cosmetics has actually declined in the past decade.

Drugs Behind Other Items

The retail price index for prescription drugs has lagged behind the composite figure for all retail items, he added.

Dr. Smith described the drug industry as one which has advanced beyond society's ability to cope with it. Touching on the financial inability of some persons to pay for medication, the speaker added: "How ironical it is that this industry should be criticized for the financial plight of millions whose lives have been saved because of the industry's contributions to medicine."

"According to figures of the Department of Commerce, we are spending today, as a percentage of disposable income, only one-tenth of 1 percent more for drug preparations and sundries than we were a generation ago, in 1939," he emphasized. "Yet virtually all the high potency drugs have come into existence since then."

Furthermore, Dr. Smith continued, the use of today's drugs actually saves money. For example, a Veterans Administration official has estimated that the reduced incidence of tuberculosis patients in VA hospitals alone has saved the federal government about $107 million.

The saving of millions of lives was made possible by the investment of enormous sums in research, he said. The industry will spend about $194 mililon this year for research alone, a five-fold increase in ten years.

"About one dollar out of every nine received in sales is now going into research in drug company laboratories," Dr. Smith added.

Last year the industry worked with 114,600 different chemical substances, of which only 1,900 showed enough promise for clinical testing, and of which less than forty are likely to become prescription drugs.

Facts such as these are not being developed at the Kefauver hearings, Dr.

—Continued on page 33

FILLING NEW POST: Albert H. Clem, named by Pennsalt Chemicals Corporation, Philadelphia, to fill the new office of vice-president in charge of marketing. He is being succeeded as general manager of the chemical specialties division by George R. Lawson.

Callery Gets the Nod Over Olin; Muskogee HEF Plant to Stay Open

Callery Chemical Company's high-energy rocket fuels plant—once doomed and later reprieved—is now going to be kept open for fuels production after all, the Air Force has decided. The move reverses an earlier Pentagon decision to keep the Muskogee, Okla., facility going only on a stand-by basis. But the new status won't become official until negotiations now under way between Callery and the Air Force are completed.

Until the Callery plant demonstrates its capability to meet military standards, Olin Mathieson Chemical Corporation's rocket fuels facility at Model City, N.Y., will be kept on tap, the Air Force says.

But, indicating that this is only a procedural matter, the AF adds, "It is anticipated that contractual coverage with the Callery company can be effected without undue delay." In all likelihood, the Olin Mathieson plant will be closed."

Callery's Big Stake in Plant

The Callery facility, which earlier was slated to be abandoned by the Air Force when the Defense Department jettisoned its $240 million HEF program, means a good deal to Callery Chemical.

At the time, just prior to the stand-by order, officials of Callery and Olin Mathieson appeared before the house science and aeronautics committee to tell the legislators just how serious was the potential damage to the two firms.

A Callery official told the committee that its decision might force the company out of business. A representative for Olin said that his company had lost some $4 million after taxes on Air Force contracts and stood to pile up additional losses if its Model City plant shut down.

Before arriving at its latest decision, the Air Force reviewed proposals submitted by both firms. The Olin Mathieson proposal was to operate its five-ton-a-day plant on a partial basis. Callery proposed to modify the Muskogee plant to produce the required fuel.

HEADS NEW DIVISION: P. L. Penaud, named to head the newly-established pigments division of Ciba Company, Inc., Fair Lawn, N.J. Previously, he had been associated with Ciba's pigment activities in western Europe.

Chlorotoluene Expansion Started By Heyden Newport

Heyden Newport Chemical Corporation is starting a plant expansion at Fords, N. J., that will double the current production of o-and p-chlorotoluenes.

A process developed in the New York firm's laboratories will be used for the first time in the new facilities to produce such derivatives as p-chlorbenzyl chloride, o-chlorobenzaldehyde and o- and p-chlorobenzoic acids.

Synthetics in Textiles Due for a Cost Study

How do synthetic fiber costs stack up here and abroad in the manufacture of textile fabrics? Answers to this and a wide assortment of related questions are being sought in a study commissioned last week by the textiles and clothing division of Business & Defense Services Administration.

Several basic fabrics will be used as standards of comparison. Costs then will be compared on the fabrics selected for such items as raw materials (synthetic

—Continued on page 63

Azelaic, Pelargonic Unit Ground Broken By Emery

Ground has been broken at Cincinnati, Ohio, for Emery Industries' at $6 million ozone oxidation plant for producing azelaic and pelargonic acids.

The primary market for azelaic and pelargonic acids is in plasticizers for vinyl plastics. Their use in this field at present is in low-temperature plasticizers which enable vinyls to maintain flexibility under cold conditions, and in polymeric plasticizers used to extend the flexible life of the plastics.

Perfume Plant in Operation

Industrial Perfumes (Private) Ltd., of Bombay, has started up operations at a new facility in Sewri, India. Industrial Perfumes, organized in 1957, is jointly-owned by Roure-Bertrand Fils & Justin Dupont, Grasse, France, and Tata Oil Mills Company, Ltd.

Texas Eastman Going Big for Polypropylene

Texas Eastman Company has decided to move into the polypropylene big leagues. A little leaguer since last September, when it started producing the plastic on a limited scale, the Eastman Kodak Company subsidiary now reports plans to build a 20-million-pound polypropylene plant at Longview, Tex.

Design for the initial unit of the plant is already under way and construction will be started early in 1960, Eastman says. Start-up of production is scheduled for late 1960, and capacity output is expected to be reached in mid-1961.

Pending start-up of the plant, Eastman will continue to make polypropylene available in limited quantities, the company reports. The plastic, trade-named "Tenite," is available in extrusion, molding and blowing grades.

Eastman, a thermoplastic producer since 1932, already holds big league franchises in acetate, butyrate, porpionate and polyethylene plastics.

Nitric Service Stepped Up

L. J. & M. Laplace Chemicals has stepped up delivery service on nitric acid to a twenty-four hour basis. The East Paterson, N. J., firm reports that the acid, in carboys, drums or bulk quantities of 1,000 gallons or more, is now available to users in the mid-Atlantic area on twenty-four-hours notice.

Monsanto Unromantically Is Killing Off Wild Oats

It's too bad, but the wild oats of legend may soon be no more.

Romantically associated down through the ages with wild young men, they are now on the way to extinction at the hands of Monsanto Chemical Company. The wild oats, that is, not the wild young men.

The St. Louis, Mo., company has developed a weedicide called "Avadex" and Canada's National Weed Committee has just officially recognized it. The product is expected to face a big future on the 60 million acres of infested croplands on the border of western Canada and the United States.

Chemical Money Around? Ecuador, Peru Want Some

A Department of Commerce trade mission to South America has gone into Ecuador and Peru and re-emerged with an attache case full of investment opportunities in new or expanding chemical enterprises.

Pharmaceutical manufacturing licenses, capital equipment for chemical production and just plain money are some of the major items in demand.

One of Ecuador's four drug houses—Tefea Laboratories, S. A.—would like to manufacture and distribute ethical drugs under license from an American company, Commerce reports. The firm, located at Guayaquil, is equally interested in a license for cosmetics, a distributorship for popular, non-prescription drugs and general capital participation.

Interested in manufacturing cosmetics under American license is Richard Santos y Cia. of Lima, Peru. Commerce reports that this firm is also seeking licenses for food colorings and additives and would like a source of raw materials used in cosmetics manfacture.

Capital, machinery and a license to manufacture chemicals for tropical diseases are requested by Laboratorio Pavil, which already has a plant established for the purpose. Needed is $30 thousand worth of chemical laboratory machinery plus additional working capital.

A license to make soap and vegetable oils and technical assistance to begin manufacture of glycerine is needed by Industrias Ales, Quito, according to Commerce's trade mission. The firm, established in 1943, is said to have adequate buildings, machinery, know-how, capital and national distribution. But it would

—Continued on page 67

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Liquid 50%, Regular and Low-Chloride Grades;
Flake, Solid and Ground.

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PERKIN MEDALIST: Dr. Karl Folkers, named to receive the fifty-fourth annual Perkin medal of the Society of Chemical Industry's American section in February. Dr. Folkers is executive director of fundamental research at Merck & Co., Rahway, N.J.

Chemical Future Seen Good But a Bit Spotty

The chemical industry will rack up an 8 percent sales gain next year, and its profits will increase by about 15 percent. But, unfortunately, not all chemical makers will share in higher gains. Profit trends, in fact, are expected to vary broadly on both sides of the 15 percent average.

Sales and profits in the drug industry will continue a vigorous growth, it is thought, but profits are likely to remain light in relation to the soaring prices of drug company stocks.

These are the latest predictions emanating from the New York brokerage publication, "Value Line Investment Survey."

"The chemical industry has been one of the most dynamic sectors of the economy in the past—and it promises to extend this record into the future," says the survey.

Expansion of pharmaceutical markets, the report notes, hinges on the development of new products. In the recent introduction of anti-depressants, the survey finds the drug industry opening up a significant new market once again.

It is still too early to evaluate the market potential for these products, according to Value Line. But the survey favorably reports sales predictions running as high as $50 million for 1960, as against

—*Continued on page 53*

Phillips Will Step Up CIS-4 To Full Commercial Output

Phillips Chemical Company, a division of Phillips Petroleum Company, Bartlesville, Okla., plans to expand its Borger, Tex. synthetic rubber plant to commercial scale.

Output of CIS-4 rubber, now at a pilot-plant level, will be stepped up to 20,000 long tons per year with an expansion scheduled to be completed by August, 1960, Phillips says.

The company expects its new rubber to replace a substantial amount of the natural variety in truck and bus tire treads.

Aerosol Makers Are Looking To Non-Food Use as the Key To a 2-Billion-Unit Demand

Production and sales of pressurized, push-button containers for non-food products should reach at least a billion units a year by 1968—double the present rate. That's the considered opinion of Ralph A. Crane, market research manager for the "Freon" products division of E. I. duPont de Nemours & Co., Wilmington, Del. What's more, Mr. Crane believes that aerosol makers might even be doing business at a 2-billion-package-a-year clip in the next decade. "Whether we make it or not," he feels, "depends on the future successful development of food aerosols."

Mr. Crane's glowing forecast is contained in an address read for him by A. H. Lawrence, jr., duPont's manager of aerosol propellent sales, at the forty-sixth annual meeting of the Chemical Specialties Manufacturers Association in Washington, D. C., last week.

8 Billion Non-Food Aerosols in 1958-1968

"In the next ten years, four times as many non-food aerosols—about 8 billion—will be produced and sold as in the last ten years," Mr. Crane predicts.

"And although food products now represent less than 20 percent of the total pressure-packaging market, they may became the single largest growth area in the next decade."

About 80 million food aerosols, mainly whipped toppings, were turned out in 1958 with compressed gases such as nitrous oxide and carbon dioxide.

Among non-food aerosols, six types of products—inseoticides, room deodorants, shave creams, hair sprays, surface coatings and colognes—accounted for 81 percent of the 1958 production of 485 million aerosol packages, Mr. Crane reports.

He thinks that these, along with dental cream which appeared in pressurized packages only within the last two years, will continue to dominate the markets.

Basing his estimates upon projections of the US population and spendable income, Mr. Crane predicts that the average annual production rate of the aerosol industry will increase 7 percent a year during the next decade.

"The production of a few products, seven in 1968, will continue to account for at least three-quarters of the total production of non-food aerosols," he says.

Here's what he thinks will happen with three of them:

- Aerosol insecticides will be produced at the rate of 107 million units a year in 1968, as compared to 71 million units

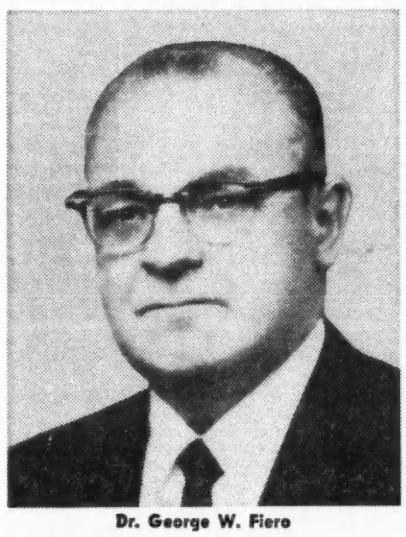
—*Continued on page 58*

Salesmen's Association Picks Slate of Candidates

The Salesmen's Association of the American Chemical Industry has picked a slate of candidates for the forthcoming election of 1960 officers and directors. Members still have until December 19 to place in nomination the names of other candidates.

Nominations are: President, G. W. Poland, jr., E. M. Sergeant Pulp & Chemical Company; vice-president, P. Tinsley, Westvaco Chlor-Alkali Division of Food Machinery & Chemical Corporation; treasurer, C. E. Griffith, R. W. Greeff & Co., and secretary, P. E. McCoy, American Potash & Chemical Corporation.

The following have been nominated as replacements to the board of directors to serve the two-year term, 1960-62: W. C. Deakyne, jr., J. R. Gilmartin, J. McInnes, jr., and A. Stern.



Dr. George W. Fiero

CSMA Elects Fiero; Hamilton in New Post

Dr. George W. Fiero of Esso Standard Oil Company, New York, was elected president of the Chemical Specialties Manufacturers Association at CSMA's forty-sixth annual meeting in Washington, D. C., last week.

H. W. Hamilton, for many years secretary of the association, was appointed to the newly-created post of executive vice-president.

CSMA's new president has for twenty-five years been engaged in research and development work in the chemical specialty field. His experience includes fourteen years of university teaching and research and three years with the War Production Board during World War II. He has been with the Esso Standard organization since 1945.

Dr. J. V. Steinle, research and development vice-president of S. C. Johnson

—*Continued on page 63*

AviSun Starts Up Output Of New Polyproplene Film

AviSun Corporation, Philadelphia, has started up commercial production of "Olefane," a new high-clarity, high-strength polypropylene film for packaging applications.

Manufacturing facilities at New Castle, Del., have a capacity of 10 million pounds per year, the company says. Film will be produced measuring from one through four mils for general packaging usage and sheets from four to twenty mil thickness for thermo-forming.

Chemical Plants Fall Behind Mark Set By Russians

It's easier to understand now why Russia's Khrushchev was so eager to buy chemical equipment on his recent tour of this country. There was more urgency to it, apparently, than that required by "peace and friendship through trade."

Production of new equipment and new plants for the chemical industry of Russia and its satellites has fallen seriously behind program goals, the United Nations now reports, and it's an odds-on bet that Russia's top man knew of the lag before the UN got wind of it.

Only 28 Percent of Goal Reached

Russia's production of chemical equipment during the first six months of the year reached only 28 percent of that planned for the whole year, according to a report of the Economic Commission for Europe, a UN agency.

As a result, large orders have been placed for chemical plant equipment in Britain, France and Italy. And even these orders are proving insufficient to prevent delays in the investment program, it is noted in the report.

Orders placed in Britain alone this year, the report goes on to say, have surpassed the $50 million spent by Russia for chemical equipment in all countries during 1958.

Chemical technology — know-how — is also proving a difficult point in Russia's plans for chemical expansion.

"One of the main difficulties facing industry," UN says, "is the slow rate of proving the efficiency of new technological processes."

It is reported that the Eastern bloc has therefore called for a new scale of priorities, to be ready this month, for automation plans in industry.

Also indicated in the report is a return to more stringent standards of labor discipline in the Eastern bloc. Increasing official emphasis is being placed on raising labor productivity through greater effort of each worker and more efficient management and organization.

The report finds that this campaign has resulted in some progress: "The improvements already apparent in 1958 in flows of supplies from those branches which

—*Continued on page 58*

Dow Has New German Unit To Serve Oil, Gas Industry

Deutsche Dow Chemie GMBH, a new chemical company, has been established in Dusseldorf, Germany, by Dow Chemical International Limited SA.

The wholly-owned German subsidiary will provide German operators of oil and gas wells with acidizing, fracturing and cementing services, Dow says.

Locations for providing such services have not yet been selected but it is expected that the principal office will be in the Hanover area with some service points to be established later in that general area.

Initial paid capital of the new corporation is 5 million Deutsche Marks, or $1,250,000.

Dow Chemical International is a unit of Dow Chemical Company, Midland, Mich.

Association Meetings

American Petroleum Institute, Division of Marketing, lubrication committee meeting, Sheraton-Cadillac hotel, Detroit, Mich., February 25-26; Division of production, southwestern district meeting, Statler-Hilton hotel, Dallas, Tex., March 2-4.

Association of American Soap & Glycerine Producers, annual convention, Waldorf-Astoria hotel, New York, January 20-22.

Association of Consulting Chemists & Chemical Engineers, luncheon meeting, Shelburne hotel, New York, February 9.

Chemical Buyers' Group of National Association of Purchasing Agents, midwinter conference (midwestern and western divisions), Congress hotel, Chicago, January 27-28; midwinter conference (eastern division), Commodore hotel, New York, February 3-4.

Chemical Market Research Association, consumer market research meeting, Lord Baltimore hotel, Baltimore, Md., February 17-18.

Chemurgic Council, annual conference, Sheraton-Park hotel, Washington, D. C., March 16-18.

Chlorine Institute, annual meeting, Commodore hotel, New York, January 20.

Compressed Gas Association, annual meeting, Waldorf-Astoria hotel, New York, January 18-20.

Electrochemical Society, LaSalle hotel, Chicago, May 1-5.

National Drug Trade Conference, annual meeting, Washington hotel, Washington, D. C., January 7.

Natural Gasoline Association of America, Gulf Coast regional meeting, Robert Driscoll hotel, Corpus Christi, Tex., January 22.

Oil Trades Association of New York, meeting, Waldorf-Astoria hotel, New York, January 20.

Pharmaceutical Manufacturers Association, central regional conference, Edgewater Beach hotel, Chicago, February 8-10; annual meeting, Boca Raton hotel and club, Boca Raton, Fla., April 4-7.

Philadelphia Drug Exchange, annual banquet, Bellevue-Stratford hotel, Philadelphia, January 27.

Salesmen's Association of the American Chemical Industry, installation luncheon, Roosevelt hotel, New York, January 19.

Society of the Plastics Industry, reinforced plastics division conference, Edgewater Beach hotel, Chicago, February 2-4.

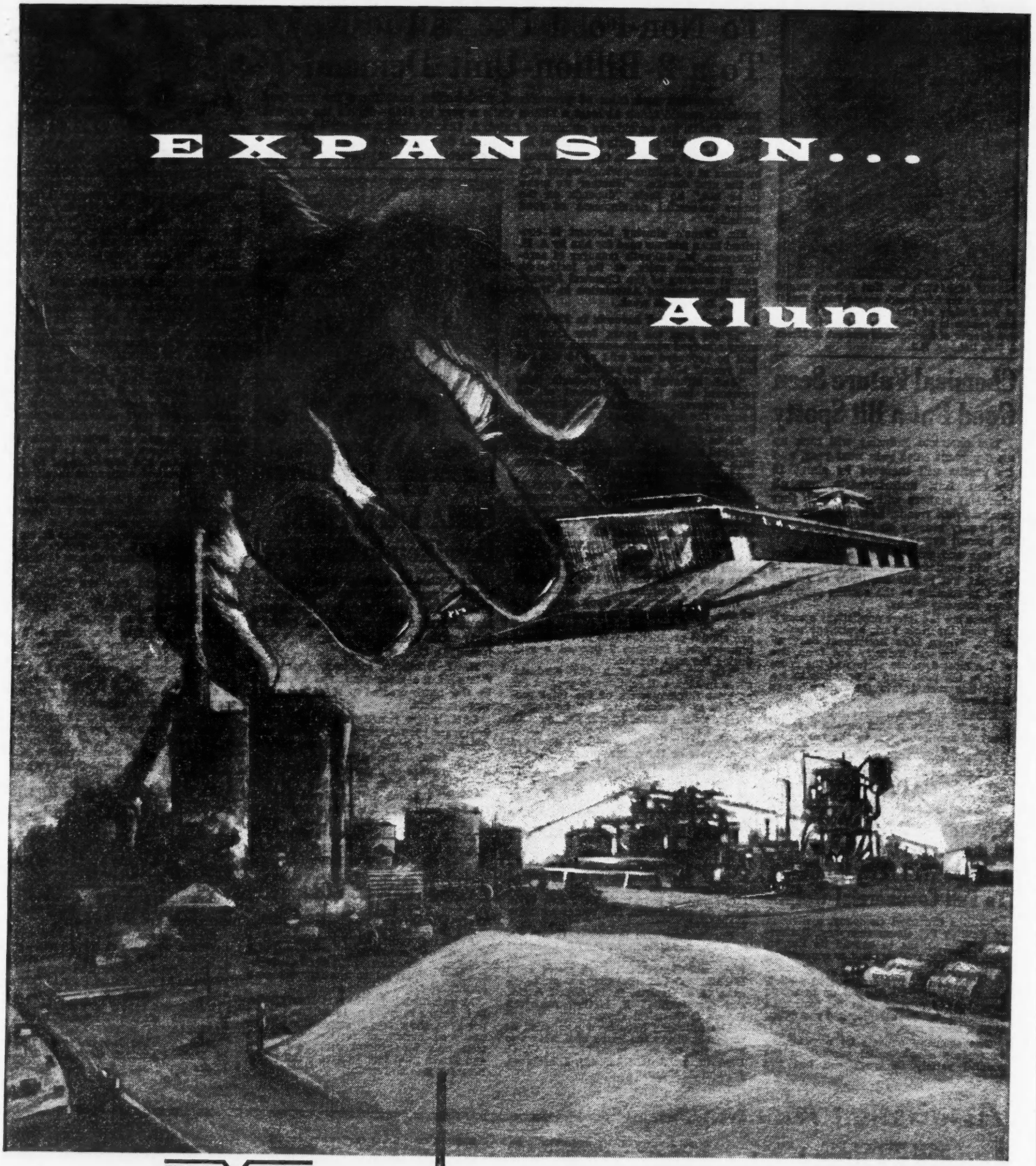
Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, January 5.

Toilet Goods Association, scientific section, spring meeting, Waldorf-Astoria hotel, New York, May 14.

Weed Society of America, annual meeting, Cosmopolitan hotel, Denver, Col., February 22-25.

EXPANSION...

Alum



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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, Dec. 11 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, cns ..... lb. 2.45 - 3.00
Acacia (see Arabic gum).
Acenaphthene, below 92.5 C. m.p., dms., works lb. .40 - —
Above 92.5 C. m.p., bbls. dms., works lb. .41 - .50
Acetaldehyde, 99%, dms., c.l., works, lb. .12 - —
dms., l.c.l., works ..... lb. .13½ - —
tanks, works ..... lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld lb. .32½ - —
bbls., bgs., ton lots, frt. alld. lb. .33½ - —
bbls., bgs., smaller lots, frt. alld lb. .36½ - —
USP, bbls., 225-lb. dms. any quantity lb. .79 - —
100-lb. dms., any quantity lb. .81 - —
Acetic acid, coml. or redist., 28%, bbls 100 lbs. 4.80 - —
56%, bbls. ..... 100 lbs. 8.25 - —
70%, bbls. ..... 100 lbs. 9.95 - —
80%, bbls. ..... 100 lbs. 10.45 - —
Acetic acid, glacial, syn., CP, dms., dlvd 100 lbs. 22.00 -23.00
tech., dms., c.l., dlvd. ... 100 lbs. 13.75 - —
dms., l.c.l., dlvd. ..... 100 lbs. 15.25 - —
tanks, dlvd ..... 100 lbs. 10.00 - —
USP, cbys., dlvd ..... 100 lbs. 31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E. lb. .16½ - —
aluminum ret. dms., l.c.l., dlvd. E. lb. .18 - —
tanks, dlvd. E. ..... lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib. dms., l.c.l., dlvd. ..... lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
fib. dms., l.c.l., dlvd. ..... lb. 1.36 - —
Acetoacet-o-toluidide fib. dms., c.l., dlvd lb. .82 - —
fib. dms., l.c.l., dlvd. ..... lb. .83 - —
Acetone, CP, dms., c.l., dlvd. .. lb. .11 - —
dms., l.c.l., dlvd ..... lb. .12½ - —
tanks, dlvd. ..... lb. .08½ - —
Acetonitrile, dms., c.l., works ... lb. .45 - —
dms., l.c.l., works ..... lb. .45¾ - —
tanks, works ..... lb. .43 - —
Acetophenetidin, USP, 200-lb. dm., 1,000 lbs., frt. alld lb. 1.22 - —
100-lb. dm., 1,000 lbs., frt. alld. lb. 1.24 - —
Acetophenone, cns., dms. ..... lb. .42 - 1.30
Tech., dms., c.l., works ..... lb. .37 - —
dms., l.c.l., works ..... lb. .37¾ - —
tanks, works ..... lb. .35 - —
N-Acetyl-p-aminophenol, 1,000-lb. lots, frt. adjusted lb. 1.45 - —
smaller lots, dms., same basis lb. 1.55 - 1.63
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .19 - —
cs., l.c.l., ex whse. ..... lb. .24½ - .30
Acetylsalicylic acid, USP, special, makers, primary distr., bbls., 1,000-lb. lots, point of shipt lb. .63½ - —
USP, standard, fine, cryst. gran., (20-40 mesh) powd., (80 mesh), 250-lb. bbls., c.l., t.l., same basis lb. .55¼ - —
Freight equald, shipt. identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., nonret. dms., c.l., frt. alld. E. of Denver lb. .35½ - —
non-ret. dms., l.c.l., frt alld. E. of Denver lb. .36½ - —
tanks, frt. alld. E. of Denver. lb. .33 - —
Acetyltriethyl citrate, tech., nonret. dms., c.l., frt. alld. E. of Denver lb. .39½ - —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40½ - —
tanks, frt. alld. E. of Denver. lb. .37 - —

ACIDS

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls ..... lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .51 - —
dms., l.c.l., works ..... lb. .51¼ - —
tanks, works ..... lb. .46 - —
Acrylamide, dms., t.l., f.o.b. works, lb. .58 - —
dms., l.t.l., same basis ..... lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.l., frt. alld lb. .57 - —
dms., l.c.l., l.t.l., frt. alld ... lb. .53 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .2949- .2950
dms., l.c.l., l.t.l., frt. alld ..... lb. .3049- .3050
tanks, frt. equald ..... lb. .2649- —

Abies Siberica Oil—Ammonium Bifluoride

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd. ..... lb. .32¼ - —
bgs., l.c.l. dlvd. ..... lb. .35 - —
Agar, USP, Kobe No. 1, strip, bls. lb. 2.10 - —
powd., 30 mesh., fib. dms lb. 2.40 - —
dl-Alanine, dms., 100-lbs. or more, f.o.b., works lb. 5.25 - —
dms., 1-99 lbs., same basis ... lb. 10.60 - —
Aldol, 95%, dms., l.c.l., works lb. .28 - —
Aldrin, tech., fib. dms. c.l., t.l., dlvd lb. .99 - —
fib. dms., l.c.l., dlvd ..... lb. 1.04 - —

ALCOHOLS

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs. ..... lb 1.75 1.85
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E of Rockies lb 2.38 - —
Alkali blue, toner, litho flushed, 125-lb bbls. same basis. lb. 1.35 - —
Alkali blue prices 1c. higher W of Rockies
Allethrin, 90% dms., frt. alld lb 28.80 -28.90
Soln. 20% dms. 200-2,000 lb. lots, frt. alld lb 6.50 6.55
2½% dms. frt. alld. ..... lb .95 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms. c.l. dlvd. ... lb. .32½ - —
dms., l.c.l. dlvd ..... lb .34 - —
tanks, dlvd. ..... lb .30 - —
Allyl bromide 55-lb. cbys. 5,005 lbs. or more, works lb 1.47 - —
55-lb. cbys., 1,045 to 4,950 lbs., works lb 1.52 - —
55-lb cbys. 55 to 990 lbs. works. lb 1.57 - —
Allyl chloride, dms., c.l. dlvd. lb. 17½ - —
dms., l.c.l., dlvd ..... lb. .19 - —
tanks, dlvd ..... lb. .15 - —
Allyl isocyanate (see Mustard Oil, syn.)
Almond oil artif, bitter (see Benzaldehyde)
Almond oil nat. bitter t.p.a. bots. lb 2.75 3.45
NF bots ..... lb 3.00 3.30
sweet, USP, cns., dms. ..... lb. .70 1.20

Abbreviations

Used in OPD Market Quotations

alld.	allowed
amorph.	amorphous
AMP	American melting point
anhyd.	anhydrous
AOAC	Association of Official Agricultural Chemists
a.p.a.	available phosphoric acid
approx.	approximately
artif.	artificial
ASTM	American Society for Testing Materials
Atl.	Atlantic
Be.	Baume
bbls.	barrels
bgs.	bags
bls.	bales
bots.	bottles
b.p.	boiling point
b.p.l.	bone phosphate of lime
b.r.	boiling range
bxs.	boxes
C.	centigrade
cbys.	carboys
CD	completely denatured
c.i.f.	cost, insurance, freight
cks.	casks
c.l.	carlots
cns.	cans
coml.	commercial
conc.	concentrated
CP	chemically pure
cps.	centipoises
cryst.	crystalline
cs.	cases
ctns.	cartons
cyls.	cylinders
d-	dextro
dbl.	double
denat.	denatured
dest-dist	destructively—distilled
dl-	dextrolaevo
dist.	distilled
distr.	distributor
djns.	demijohns
dlvd.	delivered
dms.	drums
dom.	domestic
E	east
e.p.	end point
equald.	equalized
exp.	expressed
Ext.	external
F.	fahrenheit
ferment.	fermentation
f.f.a.	free fatty acid
f.f.c.	free from chlorine
fib.	fiber
f.o.b.	free on board
f.p.a.	free of prussic acid
frt.	freight
gal.	gallon
gran.	granular
grd.	ground
I &a.	iron and aluminum
i.b.p.	initial boiling point
imp.	imported
incl.	included
indust.	industrial
kgs.	kegs
l-	laevo
lacq.	lacquer
lb.	pound
l.c.l.	less than carlots
l.t.l.	less truckload
liq.	liquid
mfrs.	manufacturers
m-	meta
m.a.p.	mixed aniline point
min.	minimum
m.p.	melting point
N-	nitrogen
n-	normal
nat.	natural
neut.	neutral
NF	National Formulary
NNR	New and Nonofficial Remedies
No.	number
nom.	nominal
o-	ortho
ord.	ordinary
oz.	ounce
p-	para
Pac.	Pacific
pf.	proof
phos.	phosphate
photo.	photographic
pkgs.	packages
powd.	powdered
precip.	precipitated
prod.	producer
pt.	point
pulv.	pulverized
purif.	purified
redist.	redistilled
refd.	refined
refy.	refinery
reg.	regular
resub.	resublimed
ret.	returnable
SD	specially denatured
s.d.	single distilled
S. E.	southeast
sec.	secondary
secs.	seconds
s.g.	specific gravity
shipt.	shipment
soln.	solution
s.u.	standard unit
syn.	synthetic
tanks.	railroad tankcars
tech.	technical
tert-	tertiary
t.l.	truck loads
t.w.	tank wagons
USP	U. S Pharmacopoeia
vis.	viscosity
VM&P	varnish makers & painters
W.	west
whse.	warehouse
w w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material

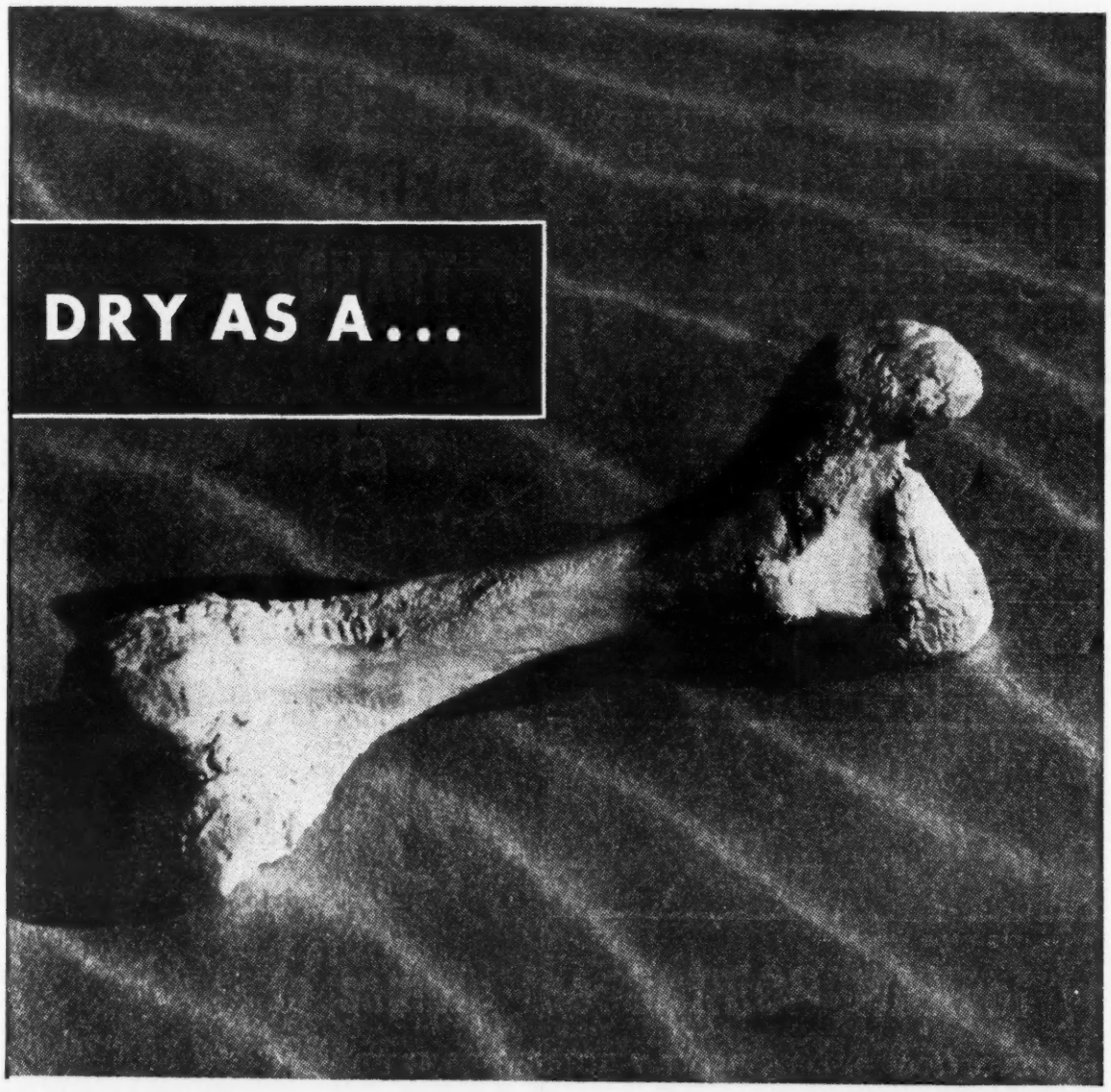
Aloe, Cape, cs. ..... lb. .25 - .40
powd., cs. ..... lb .60 .65
Curacao kgs. ..... lb .60 70
powd. kgs. ..... lb 68 —
Aloin USP bbls. dms. kgs. ... lb 3.25 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine)
Alphanitronaphthalene (see a-Nitronaphthalene)
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran. bgs., works 100 lbs. 4.30 - —
lump, dms., works ..... 100 lbs 5.05 - —
powd., dms., works .... 100 lbs. 5.20 - —
USP, burnt. dms. ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¾ - .08
Alum, potassium, gran, bgs. works. 100 lbs. 4.55 - —
lump, dms., works ..... 100 lbs. 5.30 - —
powd., dms., works .... 100 lbs. 5.45 - —
USP, burnt., dms ..... lb. .20 - .21
USP, hydrous, dms ..... lb. .07¾ - .08
Alum, potash-chrome, dms. ..... lb. .17 - —
Alumina, calcined, bgs., c.l., works. lb. .05 - —
bgs., l.c.l., works ..... lb. .05¼ - .08
Aluminum acetate, basic soln., 24%, bbls., l.c.l., works lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works ..... lb. .16½ - —
cryst., dms., c.l. works 100 lbs. 21.00 - —
dms., l.c.l. works 100 lbs. 21.50 - —
Soln., 32° cybs., c.l., works ... lb. .0495- —
cbys., l.c.l., works ..... lb .0570- .1095
tanks, works .... 100 lbs. 3.95 - —
NF, gran., dms., works ..... lb. .31 - .32
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .17¼ - —
bgs., l.c.l., works ..... lb. .18¼ - 20¼
bulk, c.l., basis 80% ..... lb. .14½ - —
Aluminum fluoride in fib. dms. 0.35c. per lb. higher
Aluminum formate, basic soln., containers extra c.l., works. 100 lbs. 11.00 - —
containers extra l.c.l. works. 100 lbs. 11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .03½ - —
bgs., 20,000-40,000 lb lots, same basis lb. .03¾ - —
bgs., 2,000-20,000 lb lots, same basis lb. .04¾ - —
bulk, c.l., same basis lb. .03¼ - —
Aluminum hydroxide, dried, USP XV, 25 lb dms., works lb. .82½ - —
fib dms., contract, works lb. 79½ - —
Aluminum hydroxide, gel, pharmaceutical, 14.15% Al_2O_3, fib. dms., works lb. .22 - —
8-9½% Al_2O_3, fib dms. works lb. .19 - —
fib dms., contract, works lb. .18 - —
Aluminum hydroxide, tech., powd. (See Aluminum hydrate).
Aluminum metal, 99%+ ingots, 10,000-lb. lots, frt alld lb. .2280 —
pigs, 10,000 lb lots, frt alld lb. .2470 —
Aluminum oxide, amorphous (See Alumina, calcined)
Aluminum paste, lining, extra-fine, dms lb. 69½ - —
Standard grade, dms. lb. 47 - —
Aluminum powder, lining, extra-fine, dms lb 1.11 - —
Standard grade, dms lb .81 - —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c per lb for 100 lb dm., 1½c per lb for 50-lb dm., 3c per lb for 10 lb. can and 5c to 12c per lb for smaller containers. Deduct 1c per lb for single shipment of 400 to 1,499 lbs., 2c for 1,500 to 4,999 lbs., 3c for 5,000 to 29,999 lbs and 4c for 30,000 lbs or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over
Aluminum resinate, precip., 2.1% Al, dms lb. .36¼ - —
Aluminum stearate, dibasic, ctns., c.l lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns. c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb .40 - .44
Aluminum sulfate, coml., grd., bgs c.l., works, frt equald ton 41.00 - —
bulk, c.l., same basis ... ton. 40.00 - —
lump, bgs., c.l. same basis ton 44.00 - —
iron-free, bgs., c.l., works, frt equald 100 lbs. 3.80 - —
bgs., l.c.l., works, frt equald. 100 lbs. 4.30 - 8.30
USP, gran., dms., works lb .20 - —
USP, powd., dms., works lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots oz. 6.50 -10.00
p-Aminoacetanilide tech., paste, dms., frt alld lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.50 1.75
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 - —
2-Amino-4-chlorophenol, tech. solid, dms., frt. alld lb. 8.10 - —
p-Aminodiphenylamine, tech., solid, dms. frt. alld lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., l.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt. alld. ..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. ..... lb. 2.50 - —
p-Aminophenol, dms., frt. alld. lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald, E. of Rockies ton. 86.00 - —
refrigeration, tanks, works, frt. equald E. of Rockies ton. 88.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies. ton. 89.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal gray, bgs., c.l., works, frt, equald 100 lbs. 8.25 —
bgs., l.c.l., same basis 100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.).
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, fib. dms. ton lots, works lb. 1.00 - —
fib dms. 1,000-lb lots, works. lb. 1.05 - —
Ammonium biborate, gran., dms., c.l., works ton. 325.00 - —
dms., ton lots, ex whse. 100 lbs. 20.40 - —
dms., smaller lots, ex whse. 100 lbs. 21.15 - —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 - —
dms., l.c.l., works ..... 100 lbs. 9.00 - —
Ammonium bichromate, dms. works. lb 42 43
Ammonium bifluoride dms. dlvd lb .2145 .2245

Ammonium bromide, NF, gran., dms., c.l., t.l., frt. equald..lb. .44 - —
dms., l.c.l., same basis ... lb. .46 - —
Ammonium carbonate, USP, lump, dms., c.l. lb. .15½- —
Ammonium chloride, white, tech., fine gran., bgs., c.l. works 100 lbs 5.75 - —
bgs., l.c.l., works .... 100 lbs 7.75 - 8.20
USP gran. fib dms .... lb. .17¼- —
Ammonium citrate, dibasic, 250-lb. dm. f.o.b works lb. .77 - —
Ammonium dichromate (see Ammonium bichromate).
Ammonium fluoride (see Ammonium bifluoride).
Ammonium gluconate, tech., 200-lb. dm., f.o.b works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqueous).
Ammonium iodide, NF, 25-lb. jar, f.o.b. works lb. 4.26 - —
Ammonium lauryl sulfate, dms., c.l., frt. alld lb. .20½- —
dms., l.t.l., frt. alld ..... lb. .21½- —
tanks, frt. alld ..... lb. .19½- —
Ammonium lignin sulfonate bgs., c.l., works 100 lbs 3.25 - —
bgs., l.c.l., works 100 lbs 3.40 - 3.65
Ammonium linoleate, 80%, dms., works lb. .50 - .55
Ammonium molybdate, CP, cryst., fib dms., 15,000 lbs. works lb 1.22 - —
fib dms., 2,000-lb contracts, works lb 1.23 - —
single fib. dms., works... lb. 1.24 - —

Ammonium nitrate dom. fertilizer grade, 33.5% N, bags, f.o.b. works..ton.67.00 - —
with dolomite, 20.5% N, bgs., c.l., Hopewell, Va ton.48.00 - —
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $3 ton base price. ton.67.00 - —
Ammonium oxalate, tech., fine gran., 250-lb. dm. f.o.b. works E lb. .28½- —
Tech., powd., 200-lb. dm., same basis..lb. .28½- —
Ammonium pentaborate, gran., bgs., c.l., works ton.193.00 - —
bgs., ton lots, ex whse..100 lbs.14.23 - —
bgs., smaller lots, ex whse..100 lbs.15.48 -17.48
Ammonium pentaborate powder $10 per ton higher in bags.
Ammonium persulfate, tech., dms., 10-ton lots or more, works. lb. .18 - —
dms., smaller lots, works .. lb. .20 - .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼- —
bgs., l.c.l., same basis..... lb. .10 - —
Dibasic, NF, V, bbls., dms..lb. .46 - —
Dibasic, tech., bgs., c.l., works, frt. alld..lb. .09¼- —
Ammonium silicofluoride, dms., works lb. .11¾- .13¼

Ammonium sulfamate bgs., c.l., t.l., works lb. .19 - —
bgs., l.c.l., works ..... lb. .20¼- .27
Ammonium sulfate, standard granular, bulk, f.o.b. works, base price ton.32.00 - —
purif., bgs., f.o.b. works ...lb. .08¾- .15
Large granular, bulk, c.l., works. ton.35.00 - —
bgs., c.l., works..... ton.40.00 - —
Tech., bulk c.l., t.l., works ton.52.00 - —
bgs., c.l., t.l., works ..... ton.56.00 - —
bgs., l.c.l., l.t.l., works—100 lbs 3.20 - 7.20
Ammonium sulfide, liq., 40-44%, tanks, frt., equald.,100% basis ton.160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., cryst., dms., c.l., works..lb. .20 - —
dms., l.c.l., works ..... lb. .22 - .26
Tech., soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycollate, coml., chys., 100% basis..... lb. 1.35 - 1.65
Highly purif., chys. 100% basis. lb. 1.70 - 1.96
d-Amphetamine hydrochloride, monobasic, dms..lb.17.50 -23.50
dl-Amphetamine hydrochloride, dibasic, dms..lb. 4.50 - 6.00
d-Amphetamine phosphate, fib. dms., 100-lb lots lb.15.00 - —
dl-Amphetamine phosphate, dms.lb. 4.20 - 5.60
d-Amphetamine sulfate, fib. dms., lb.15.00 -17.00
dl-Amphetamine sulfate, fib. dms., lb. 4.20 - 5.60

Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt. alld, E. of Rockies. lb. .18½- .19
dms., l.c.l., same basis... lb. .20 - .20½
tanks, same basis..... lb. .16 - .16½
Ex pentane, reg., dms., c.l., dlvd. lb. .19 - —
dms., l.c.l., dlvd. ..... lb. .21½- —
tanks, dlvd. ..... lb. .16½- —
tech., dms., c.l., dlvd..... lb. .17 - —
dms., l.c.l., dlvd..... lb. .18½- —
tanks, dlvd. ..... lb. .14½- —
Syn., oxo process, dms., c.l., dlvd. lb. .19 - —
dms., l.c.l., dlvd..... lb. .20½- —
tanks, dlvd. ..... lb. .16½- —
Amyl alcohol, ex fusel oil (see Fusel oil refd.).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., dlvd lb. .43½- —
refd., ACS grade, dms., l.c.l., dlvd lb. .45½- —
Amyl alcohol, ex pentane, mixed, amyls, dms., c.l., frt. alld. lb. .19 - —
dms., l.c.l., frt. alld..... lb. .20½- —
tanks, frt. alld ..... lb. .16½- —
primary, dms., c.l., frt. alld. lb. .19¾- .20¼
dms., l.c.l., frt. alld..... lb. .21¼- .21¾
tanks, frt. alld ..... lb. .17¼- .17¾
sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., l.c.l., works..... lb. .20¼- —
tanks, works. ..... lb. .17 - —
tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
dms., l.c.l., frt. alld. E... lb. .18½- —
tanks, frt. alld. E ..... lb. .14½- —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., l.c.l., works..... lb. .43 - —
tanks, works ..... lb. .39½- —
2-pentanol, dms., c.l., works..lb. .65 - —
dms., l.c.l., works..... lb. .70 - —
tanks, works ..... lb. .60 - —
Amyl n-butyrate, dms..... lb. 1.00 - 1.25
Amyl cinnamic aldehyde, dms..lb. 1.70 - 2.20
p-tert Amyl phenol, dms., c.l., works. lb. .26¾- —
dms., l.c.l., works ..... lb. .27¾- —
Amyl salicylate, cns., dms.....lb. .73 - 1.08
Amyris oil, dms ..... lb. 1.50 - 1.90
Anethole, tech., dms. ..... lb. .92 - 1.00
USP, cns., dms. ..... lb. 1.12 - —
Angelica root, bls. ..... lb. .90 - 1.00
Angelica root oil, bots..... lb.120.00 -140.00
Angelica seed oil, bots. ..... lb.120.00 -130.00
Aniline, dms., c.l., frt. alld..... lb. .20 - —
dms., l.c.l., frt. alld. ..... lb. .21 - —
tanks, frt. alld. ..... lb. .18 - —
Aniline oil (see Aniline).
Aniline salt, dms., c.l., truckloads, 20,000 lbs. min., frt. alld. lb. .33 - —
dms., l.c.l., same basis..... lb. .35 - —
Anise oil, USP, dms. ..... lb. 1.75 - 3.00
Anise seed, Mexican, bgs..... lb. .22 - —
Spanish, bgs. ..... lb. .19 - —
Anisic aldehyde, dms..... lb. 1.50 - 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
dms., l.c.l., same basis..... lb. .82 - —
tanks, same basis ..... lb. .78 - —
p-Anisidine, dms., works..... lb. .97 - —
Anthracene, 90-95%, dms., c.l., t.l., f.o.b., works lb. .42½- —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5% bbls., c.l., frt. alld lb. .83 - —
bbls., l.c.l., same basis ..... lb. .86 - —
Electrical grade, bbls., l.c.l., same basis lb. 1.10 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .29 - —
cs., c.l., mines ..... lb. .29½- —
Antimony oxide, bgs., c.l., frt. alld. lb. .24½- —
bgs., l.c.l., frt. alld. ..... lb. .26 - —
Prices of antimony oxide are 2¢ higher west of the Rockies.
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd lb. .23 - —
bgs., smaller lots, dlvd lb. .24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l., works ..... lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb. dm., f.o.b. works, E lb. .69½- —
USP, powd., 250-lb. dm., same basis. lb. .74½- —
Apomorphine hydrochloride, USP, bots., 25-oz. lots..oz.35.60 - —
Apricot kernel oil, USP, dms....lb. .70 - 1.25
Arabic gum, amber sorts, 10 bgs. lb. .29 - —
USP, powd., bbls..... lb. .33 - —
Areca nuts, powd., bbls. ..... lb. .13 - —
Arecoline hydrobromide, NF, bots., tins..oz. 4.00 - —
l-Arginine, free base, dms., 10-kilo lots or more kilo.90.00 - —
l-Arginine glutamate, dms., 10-kilo lots or more kilo.60.00 - —
l-Arginine monohydrochloride, dms., 10-kilo lots or more..kilo.60.00 - —
Arnica flowers (true Montana), bls. lb. .75 - —
Aromatic petroleum solvents—See Solvent Naphtha, petroleum, aromatic
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works..... lb. .031 - —
Arsenic trioxide, USP, dms ... lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls., l.c.l., works..... lb. .06½- .07¼
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb 3.70 - —
Light shades, bbls. ..... lb 2.85 - —
Asafetida gum, cns ..... lb .36 - .40
Powd., bbls., dms ..... lb .75 - .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons) mines ton 86.00 - —
7D, c.l. (30 tons) mines ton 75.00 - —
7F, c.l. (30 tons) mines ton 71.00 - —
7H, c.l. (30 tons) mines ton 61.00 - —
7K, c.l. (30 tons) mines ton 50.00 - —
7M, c.l. (30 tons) mines ton 44.00 - —
7R, c.l. (30 tons) mines ton 43.00 - —
7RF, c.l. (30 tons) mines ton 44.00 - —
7T, c.l. (30 tons) mines ton 41.00 - —
7TF c.l. (30 tons) mines ton 44.00 - —
Ashestos prices are in Canadian funds; l.c.l. lots $4 per ton higher
Ascorbic acid, USP, 25, 50-kilo dms., kilo.10.00 - —
10 kilo dms. ..... kilo.10.35 - —
5-kilo dms. ..... kilo.10.75 - —
1-kilo bottle ..... kilo.11.00 - —
500-gram bottle ..... kilo.11.50 - —
Ash black (see Barium sulfide).
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.40.00 - —
ex-whse, N. Y., N. J ton.86.50 - —
seconds, 300°-390°F. fusing pt. bgs., c.l., mines ton.35.00 - —
select, 350°F. fusing pt., bgs. c.l., mines ton.41.00 - —
270°-295°F. fusing pt., bgs., c.l., mines ton.40.00 - —
Manjak No. 10 crude, dms., works. lb. .07 - —



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Versatile Enjay Anhydrous Isopropyl Alcohol is employed in the formulation of aerosols, nitrocellulose lacquer, chemical reactions and many other applications requiring low water content. It is also available in 91% and 95% concentrations for use in rubbing compounds, antiseptics, cleaning agents and for general external applications.

Fill your requirements with Enjay Isopropyl Alcohol. It's economical and efficient . . . non-potable . . . free of Alcohol Tax Unit regulations. The Enjay Company also offers a complete line of petro-chemicals for industrial use.

FOR COMPLETE INFORMATION on specifications and performance characteristics of Isopropyl Alcohol, and many other high quality petrochemicals, contact the nearest Enjay office. Shipments will be made from conveniently located distribution points in tank car, truck, or 55 gal. drum quantities.

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Asphalt, petroleum, cut-back, tanks, tankwagon, refy.	gal.	.09½	—
emulsion tanks tankwagon, refy.	gal.	09½	—
steam-refd., 50-80 penetration, tanks, tankwagon, refy.	ton	21 00	—
85-300 penetration tanks, tankwagon refy	ton	20.00	—
Aspirin (see Acetylsalicylic Acid)			
Atropine, NF tins	oz	5.75	6.50
Atropine sulfate USP bots	oz	5.25	5.75
Avocado oil, crns., f.o.b. Calif.	lb.	2.25	3.00

B

Bacitracin, bulk, 1,000,000,000 or more units	50,000 units	.65	—
less than 1,000,000,000 units, 50,000 units		70	—
Balm of Gilead buds dried bgs	lb	1.25	1.35
Barberry root bark, bgs	lb.	1.00	1.25
Barbital, NF, 100-lb dms.	lb	4.50	—
Barbital sodium NF dms.	lb	4.75	—
Barium carbonate, precip., bgs., c.l., works	ton	111.50	—
bgs. smaller lots, works	ton	126.50	—
Barium chlorate, dms., works	lb	.32	.41
Barium chloride, anhyd., bgs., c.l., works	ton	176.00	—
bgs. t.c.l. works	ton	196 00	—
NF, cryst., 100 lb. dms.	lb.	.22	—
Tech. cryst bgs. c.l. works, 100 lbs		7.00	—
bgs., t.c.l., works	100 lbs	8.00	—
Barium cromate bgs frt. equald	lb	.38	—
Barium dioxide (see Barium peroxide)			
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald	ton	208.00	—
bgs. t.c.l. t.l.l. frt equald	ton	218 00	—
Barium monohydrate, 99% bgs., c.l. frt equald	100 lbs	11.25	—
bgs., t.c.l., frt equald	100 lbs	11.75	—
Barium monoxide (see Barium oxide)			
Barium nitrate bbls. c.l., t.l. dlvd	lb.	.16	—
bbls. t.c.l. t.l.l. dlvd	lb	.17	—
Barium oxide grd., dms. c.l. t.l., frt equald	ton	275 00	—
dms., t.c.l., t.l.l., frt. equald.	ton	285 00	—
Barium peroxide dms. frt. equald.	lb	.20	—
Barium stearate ctns. c.l. frt alld.	lb	.41	—
ctns., t.c.l., same basis	lb	.42	.46
Barium sulfate, tech. (see Barytes and blanc fixe)			
Barium sulfate, X-ray, 100-lb. dm.	lb	.19½	—
Barium sulfide dms., c.l., works	ton	100.00	—
dms., t.c.l., works	ton	110 00	—
Baryles, southern off-color, bgs.	mines	ton 25.00	—
95-75%, bgs., mines	ton	25 00	—
white water-grd., paper bgs. c.l., St. Louis	ton	55 00	55.25
paper bgs. ex whse., New York	ton	79 85	—
Battery acid, cbys. c.l. works, E	100 lbs	2.35	—
cbys., t.c.l., works, E	100 lbs	2.65	10.95
Bauxite, bulk mines	ton	7 00	10 00
Bay oil, NF, Puerto Rican, 50-55%	cns	lb. 1.95	2.70
55-60%, cns	lb	2.50	3.05
NF, West Indian, 50-55%, cns., dms	lb.	2.35	—
Bayberry wax, bgs	lb.	.45	.50
Beeswax, crude, African, bgs	lb.	.53	.55
Brazilian, bgs.	lb.	58	Nom.
Central American, bgs	lb.	Nom.	
Chilean, bgs.	lb.	.59	Nom.
Refd. USP bleached white, bricks, 100-lb ctns	lb.	69	71
white, slabs, 100-lb. ctns	lb.	.63	.70
yellow, bricks, 100-lb. ctns	lb.	.59	.61
yellow, slabs, 100-lb. ctns	lb.	.58	.60
Belladonna leaf, bls.	lb.	.26	—
Belladonna root, bls.	lb.	.28	—
Bentonite, dom 200 mesh, bgs., c.l., mines	ton	14.00	—
Imp Italian, white, high gel., bgs., 5-ton lots, ex whse	ton	95.20	—
bgs., 1-ton lots, ex whse	ton	99.00	—
Imp., Italian, white, low gel., bgs., 5-ton lots, ex whse	ton	93.40	—
bgs., 1-ton lots, ex whse	ton	97.16	—
Benzal chloride, cbys., works	lb	.44	—
Benzaldehyde, NF, dms.	lb.	.80	1.05
Tech., dms., c.l., t.l.	lb.	.47	—
dms., l.c.l.	lb.	.48	—
Benzene, coaltar, pure or nitration, tanks, works:			
Bethlehem, Pa.	gal.	.31	—
Birmingham district	gal.	.31	—
Chicago district	gal.	.31	—
Cleveland district	gal.	.31	—
Geneva, Utah	gal.	.31	—
Johnstown, Pa.	gal.	.31	—
Lackawanna, N. Y.	gal.	.31	—
Lone Star, Tex.	gal.	.31	—
Lorain, Ohio	gal.	.31	—
Middletown, Ohio	gal.	.31	—
Mennequa, Colo.	gal.	.31	—
Philadelphia district	gal.	.31	—
Pittsburgh district	gal.	.31	—
Sparrows Point, Md.	gal.	.31	—
Syracuse, N. Y.	gal.	.31	—
Terre Haute, Ind.	gal.	.31	—
Youngstown, Ohio	gal.	.31	—
Benzene, petroleum, nitration or industrial, Houston, Tex., tanks,	gal.	.31	.40
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).			
Benzene hexachloride, tech., high gamma, dms., c.l., dlvd.,	gamma unit-lb.	.00825	—
dms., t.c.l., works	gamma unit-lb.	.009	.0095
Tech., low gamma, dms., c.l., dlvd.	gamma unit-lb.	.00825	—
dms., t.c.l., works	gamma unit-lb.	.009	—
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis	lb.	1.19	—
bbls., t.c.l., same basis	lb.	1.21	—
Benzidine sulfate, tech., bbls., frt. alld., 100% basis	lb.	1.21	—
Benzidine yellow, AAA, bbls. dlvd	lb.	2.20	—
AAOT, bbls., dlvd.	lb.	2.55	—
Lightfast, bbls., dlvd.	lb.	3.40	—
Benzocaine, dms.	lb.	3.48	3.50
Benzoic acid, tech., bbls., dms., c.l., t.l., frt., alld	lb.	.37	—
bbls., dms., ton lots, same basis	lb.	.41	—
bbls., dms., 1,000-lb. lots, same basis	lb.	.43	—
USP, bbls., dms., ton lots	lb.	.48	—
bbls., dms., 1,000-lb. lots	lb.	.50	—

BENZOL
Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum Sumatra, cs.	lb.	.33	—
Benzophenone, dms.	lb.	1.40	1.65
Benzotriazole, tech. dms., 1,000-lb. lots, works	lb	2.25	—
Benzotrichloride, cbys., 1,000-lb. lots or more, frt., equald	lb.	.21	—
cbys. smaller lots, frt., equald	lb.	.23	—
Benzoyl chloride, cbys., dms., c.l., works, frt., equald	lb.	.22	—
cbys., t.c.l., same basis	lb.	.23	—
tanktrucks, dlvd. Metropolitan area	lb.	.21	—
Benzoyl peroxide, purif., fib dms., 50 to 1,000-lb. lots, works	lb.	.98	1.02
Benzyl acetate, t.t.c., cns., dms	lb.	58	.79
Benzyl alcohol, NF, dms.	lb.	.58	.80
Tech. dms., dlvd	lb.	47½	.65
Benzyl benzoate, NF, USP, 40-lb. dms	lb.	.68	—
Benzyl chloride, tech., cbys., dms., c.l., works, frt., equald	lb.	.22½	.25½
cbys., dms., l.c.l., same basis	lb.	23½	25½
tanktrucks, dlvd., Metropolitan area	lb.	.21	—

A 2½c. differential is quoted on benzyl chloride in 5-gal cbys. In steel dms. prices are ½c. lower

Benzyl cinnamate, cns.	lb.	3.30	3.60
Benzyl dimethylamine, dms., works.	lb	2.25	—
Benzyl formate cns.	lb	1.85	2.10
Benzyl isoeugenol, cns	lb.	9.25	—
Benzyl propionate bots.	lb.	1.35	1.65
Benzyl salicylate, bots.	lb.	1.50	1.85
Benzylidine acetone bots.	lb	1.75	1.80
Benzylidine chloride (see Benzal chloride).			
Berberin bisulfate cns	lb.	48.50	—
Berberine hydrochloride, bots	lb.	48.50	—
Bergamot oil, nat. NF Italian cns.	lb.	12.60	14.00
Betagammapicoline (see b,g-Picoline).			
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid)			
Betaoxynaphthoic acid (see b-Oxynaphthoic acid)			
Betamethylnaphthalene (see b-Methylnaphthalene)			
Betanaphthol (see b-Naphthol)			
Betanaphthylamine (see b-Naphthylamine)			
Betaphenylethylamine (see b-Phenylethylamine)			
BHC (see Benzene hexachloride tech.)			
Biotin cryst. bots	gram	10.00	—
Biphenyl (see Diphenyl).			

Birchtar oil crude, cns.	lb.	1.50	1.90
Rectified, cns.	lb.	1.75	2.00
Bismuth chloride, bars	lb.	5.11	—
Bismuth hydroxide, dms.	lb.	4.60	4.65
Bismuth metal, bxs. ton lots	lb.	2.25	—
Bismuth nitrate cryst. dms.	lb.	2.08	2.17
Bismuth oxide, anhyd., 100-lb. dm., f.o.b. works	lb.	4.42	—
Bismuth oxychloride, 25-lb dm., f.o.b. works	lb.	4.42	—
Bismuth subcarbonate, USP dms.	lb	3.20	—
Bismuth subgallate, NF, 200-lb. dm., f.o.b. works	lb.	3.15	—
Bismuth subiodide, fib. dms.	lb.	5.37	—
Bismuth subnitrate NF, 200-lb. dm., f.o.b. works	lb.	2.65	—
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works	lb.	3.50	—
Bismuth-ammonium citrate, USP, powd., jars	lb	4.22	—
Bisphenol-A, bgs., c.l., t.l., single shipt., 70,000-lbs. or more, frt. alld	lb.	.29½	—
bgs., c.l., t.l., less than 70,000 lbs., same basis	lb.	.30	—
bgs. t.c.l. same basis	lb	.31	—
Blackberry root bark bls.	lb	.50	.55
Black haw root bark bls.	lb	.63	.65
Black haw tree bark bls	lb	.45	.50

BLACK PIGMENTS
Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs	c.l., works	ton	145 00 —
bgs., l.c.l., works		ton	155 00 —
bgs., l.c.l., New York whse		ton	195 00 —
Blood, dried, 16-16½% ammonia, bgs., New York unit-ton			5.00 —
high-grade, unground, 16-17% ammonia, bgs. Chicago unit-ton			5.00 —
Bloodroot, bls.		lb.	.90 1.00

BLUE PIGMENTS
Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

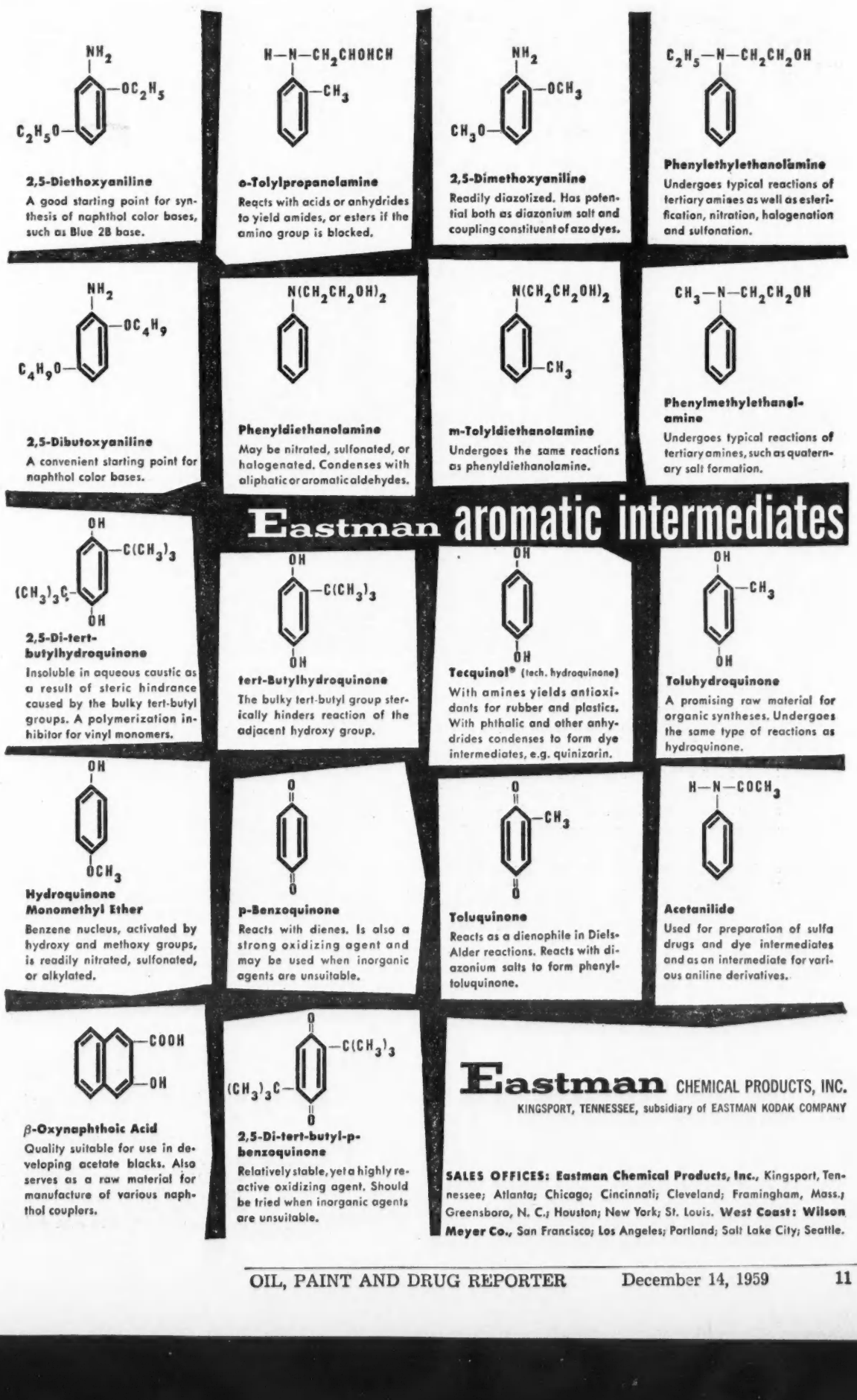
Blue dyes (see Dyes)			
Blue vitriol (see Copper sulfate)			
Bois de rose oil, Brazilian dms	lb	1.90	2.55
Peruvian dms.	lb	1.80	2.25
BON acid maroons, pure, bbls	lb	1.75	—
Resinated bbls.	lb	1.50	—
Bone black, dms., l.c.l. frt. alld	lb.	.18	.22¼

Pacific coast bone black prices 2c. per lb. higher

Bonemeal, steamed, works, E	ton	75.00	—

Bone phosphate, defluorinated of lime (see Defluorinated phosphate).

Bone phosphate, precip. (see Calcium phosphate, tribasic).


2,5-Diethoxyaniline
A good starting point for synthesis of naphthol color bases, such as Blue 2B base.
o-Tolylpropanolamine
Reacts with acids or anhydrides to yield amides, or esters if the amino group is blocked.
2,5-Dimethoxyaniline
Readily diazotized. Has potential both as diazonium salt and coupling constituent of azo dyes.
Phenylethylethanolamine
Undergoes typical reactions of tertiary amines as well as esterification, nitration, halogenation and sulfonation.
2,5-Dibutoxyaniline
A convenient starting point for naphthol color bases.
Phenyldiethanolamine
May be nitrated, sulfonated, or halogenated. Condenses with aliphatic or aromatic aldehydes.
m-Tolyldiethanolamine
Undergoes the same reactions as phenyldiethanolamine.
Phenylmethylethanolamine
Undergoes typical reactions of tertiary amines, such as quaternary salt formation.
Eastman aromatic intermediates
2,5-Di-tert-butylhydroquinone
Insoluble in aqueous caustic as a result of steric hindrance caused by the bulky tert-butyl groups. A polymerization inhibitor for vinyl monomers.
tert-Butylhydroquinone
The bulky tert-butyl group sterically hinders reaction of the adjacent hydroxy group.
Tecquinol® (tech. hydroquinone)
With amines yields antioxidants for rubber and plastics. With phthalic and other anhydrides condenses to form dye intermediates, e.g. quinizarin.
Toluhydroquinone
A promising raw material for organic syntheses. Undergoes the same type of reactions as hydroquinone.
Hydroquinone Monomethyl Ether
Benzene nucleus, activated by hydroxy and methoxy groups, is readily nitrated, sulfonated, or alkylated.
p-Benzoquinone
Reacts with dienes. Is also a strong oxidizing agent and may be used when inorganic agents are unsuitable.
Toluquinone
Reacts as a dienophile in Diels-Alder reactions. Reacts with diazonium salts to form phenyltoluquinone.
Acetanilide
Used for preparation of sulfa drugs and dye intermediates and as an intermediate for various aniline derivatives.
β-Oxynaphthoic Acid
Quality suitable for use in developing acetate blacks. Also serves as a raw material for manufacture of various naphthol couplers.
2,5-Di-tert-butyl-p-benzoquinone
Relatively stable, yet a highly reactive oxidizing agent. Should be tried when inorganic agents are unsuitable.
Eastman CHEMICAL PRODUCTS, INC.
KINGSPORT, TENNESSEE, subsidiary of EASTMAN KODAK COMPANY
SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; Atlanta; Chicago; Cincinnati; Cleveland; Framingham, Mass.; Greensboro, N. C.; Houston; New York; St. Louis. West Coast: Wilson Meyer Co., San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

Borax—Calcium Carbonate

Borax, tech., anhyd, 99½%, bgs., c.l., works ton 92.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 7.42 - —
bgs., smaller lots, same basis 100 lbs 8.67 - 10.67
bulk, c.l., works ton 83.00 - —
gran., decahydrate, 99½% bgs., c.l., works ton 50.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 5.32 - —
bgs., smaller lots same basis. 100 lbs. 6.57 - 8.57
bulk, c.l., works ton 43.50 - —
gran., pentahydrate, 99½% bgs., c.l., works ton 64.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.05 - —
gran., pentahydrate, 99½%, bgs., smaller lots, same basis 100 lbs. 7.30 - 9.30
bulk, c.l., works ton 58.00 - —
USP, powd., bgs., c.l., works. ton 54.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 6.45 - —
bgs., smaller lots, same basis. 100 lbs. 7.70 - 9.70

Bordeaux powder tribasic bgs., c.l., dlvd lb. .24 - —
bgs., l.c.l., same basis lb. .26 - —

Boric acid, tech. anhyd. 99.9% bgs., c.l., works ton 335.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 19.62 - —
bgs., smaller lots, same basis. 100 lbs. 20.87 - 22.87

Boric acid, tech., anhyd., cryst., 99.9%, bgs., c.l., works ton 163.50 - —
bgs., ton lots ex whse, New York or Chicago 100 lbs. 11.03 - —
bgs., smaller lots, same basis. 100 lbs. 12.30 - 14.30
dms., c.l., works ton 188.50 - —
dms., ton lots, ex whse., New York or Chicago. 100 lbs. 12.30 - —
bgs., smaller lots, same basis 100 lbs. 13.05 - —
gran., 99.9% bgs. c.l., works. ton 112.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 8.47 - —
bgs., smaller lots, same basis. ton 174.25 - —
dms., c.l., works ton 137.00 - —
dms., ton lots, ex whse, New York or Chicago 100 lbs. 9.72 - —
dms., smaller lots same basis. 100 lbs. 10.47 - —
bulk, c.l., works ton 106.00 - —
powd., bgs., ton tots, ex whse, New York or Chicago. 100 lbs. 8.85 - —
bgs., smaller lots, same basis. 100 lbs. 10.10 - 12.10
dms., smaller lots, same basis 100 lbs. 11.45 - —

USP boric acid $25 per ton higher in bags.

Borneol, cns lb. 2.75 - —
Boron trichloride, CP, 1,800-lb. cyls., works lb 1.25 - —
100-lb. cyls., works lb. 1.70 - —
Boron trifluoride, gas, cyls, t.l., works lb. .70 - —
cyls., l.t.l., works lb. .70 - —
Brimstone (see Sulfur).
Broenner's acid, bbls. lb. 1.53 - —
Bromine, purif., cs., c.l., t.l., dlvd. E of Rockies lb. .32 - —
cs., l.c.l., same basis lb. .34 - .39
ret. dms., c.l., t.l., dlvd. E. of Rockies lb. .31 - —
ret. dms., l.c.l., same basis lb. .31 - .34
tanks, same basis lb. .21½ - —
Bromochloromethane, dms., c.l., frt. equald lb. .48 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Bromoform, pharmaceutical grade, 100-lb. cbys lb. 1.80 - 1.90
Bromstyrol, bots. lb. 5.35 - 5.70
Brucine, cns. oz. 1.50 - 1.75
Brucine sulfate, NF, cns oz. 1.50 - 1.75
Buchu leaves, bls lb. .75 - .80

BROWN PIGMENTS

Brown pigment quotations are listed individually. For example, prices on Brown, Iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd. cyls., c.l., refy lb. .21 - —
cyls., l.c.l., refy lb. .22 - —
tanks, refy. lb. .14½ - —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., same basis lb. .18½ - —
tanks, same basis lb. .14½ - —
Syn., dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., same basis lb. .18½ - —
tanks, same basis lb. .14½ - —
sec-Butyl acetate, syn., dms., c.l., dlvd.E. lb. .14¾ - —
dms., l.c.l., same basis lb. .16¼ - —
tanks, same basis lb. .12¼ - —
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld. E. lb. .42½ - —
dms., l.t.l., same basis lb. .43½ - —
tanks, same basis lb. .40 - —

Prices of n-butyl acrylate are 1c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

n-Butyl alcohol, ferment, dms., c.l., frt. alld. lb. .17½ - —
dms., l.c.l., frt. alld lb. .19 - —
tanks, frt. alld lb. .15 - —
n-Butyl alcohol, syn., dms., c.l., dlvd. lb. .17½ - —
dms., l.c.l., frt. alld lb. .19 - —
tanks, dlvd. lb. .15 - —
Sec-synthetic, dms., c.l., dlvd. lb. .15 - —
dms., l.c.l., dlvd lb. .16½ - —
tanks, dlvd lb. .12½ - —
Tert-synthetic, dms., c.l., frt. alld. dlvd. E. lb. .15 - —
dms, l.c.l., same basis lb. .16½ - —
tanks, same basis lb. .12½ - —

Butyl aldehyde (see Butyraldehyde).

Butyl chloride, dms., c.l., works lb. .37½ - —
dms., l.c.l., works lb. .38¼ - —
n-Butyl ether dms., c.l., works lb. .35¼ - —
dms., l.c.l., works lb. .36 - —
tanks, works lb. .33¼ - —
Butyl lactate, dms., c.l., frt. alld. E. of Rockies lb. .42½ - —
dms., l.c.l., same basis lb. .43½ - —
tanks, same basis lb. .40 - —
Butyl taurate, dms., works lb. .37½ - —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 - —
dms., l.c.l., works lb. .55½ - —
Butyl oleate, refd., dms., l.c.l., works lb. .32 - —
Butyl phenylacetate, dms. lb. 4.50 - 4.60

Butyl phthalate (see Dibutyl phthalate).

Butyl stearate, dms., c.l., frt. alld. E. of Mississippi lb. .27¼ - —
dms., l.c.l. same basis lb. .28¼ - —

Butylamine (see Mono-, Di- and Tri-butylamine)
6-tert-Butyl-m-cresol (see Mono-tert-butyl-m-cresol).
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).

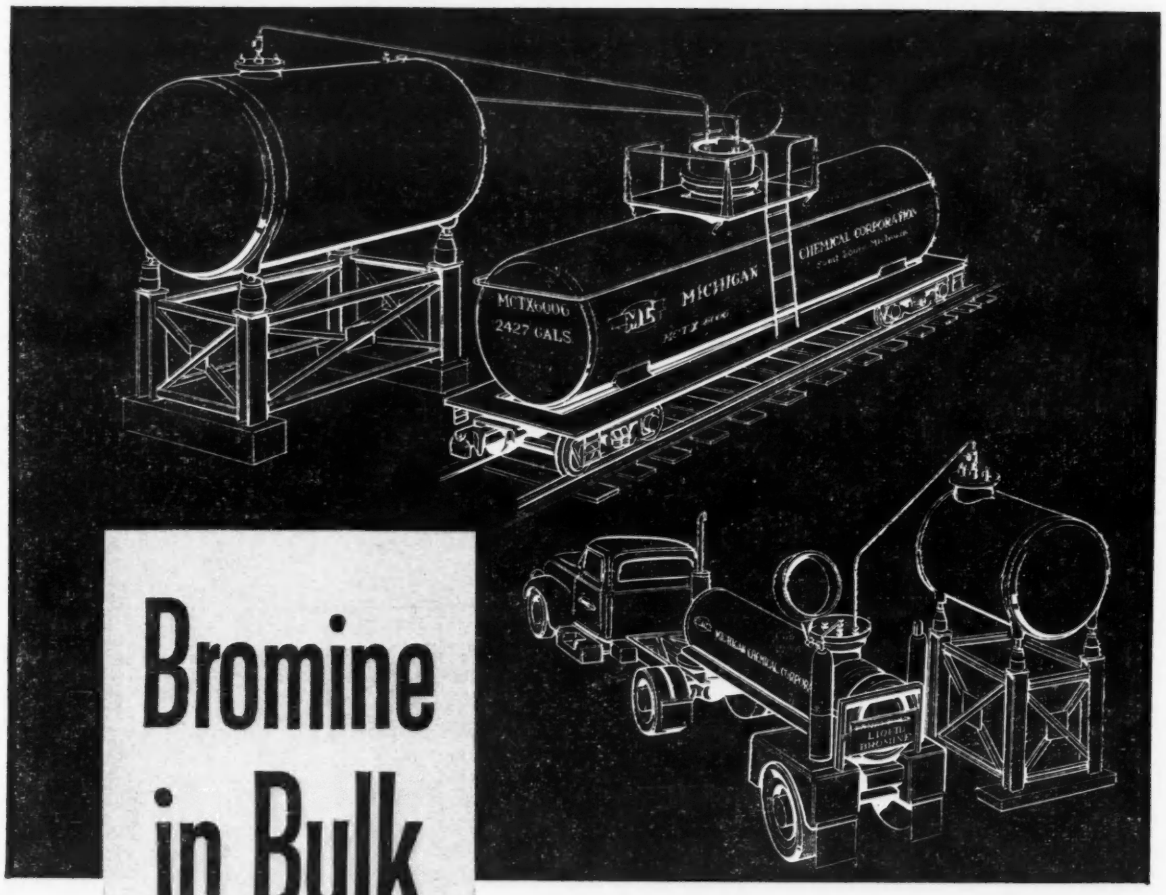
p-tert-Butylphenol, bgs., c.l., dlvd. lb. .27½ - —
bgs., l.c.l., works lb. .28½ - —
Butyraldehyde, dms., c.l., dlvd lb. .22 - —
dms., l.c.l., dvld. lb. .23½ - —
tanks, dlvd. lb. .19½ - —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 - —
dms., l.c.l., same basis lb. .34½ - —
tanks, same basis lb. .32½ - —

Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter).

Cadmium CP red, dark shade, bbls., frt alld, E. of Rockies lb. 5.45 - —
Light shade, bbls same basis lb. 4.55 - —
Medium shade, bbls., same basis. lb. 5.20 - —
Medium light shade bbls. same basis lb. 4.80 - —
Orange-red shade, bbls., same basis lb. 4.20 - —
Yellow all shades, bbls. frt. alld. E. of Rockies lb. 3.75 - —
Cadmium iodide, 25-lb fib dms. lb 6.75 - 7.00
Cadmium metal, ingots or sticks, ton lots, cs., dlvd lb. 1.30 - —
Cadmium-mercury lithopone orange, deep shade, bbls., frt alld E. of Rockies lb. 1.61 - —
Cadmium mercury lithopone red, dark shade, bbls., same basis lb. 1.91 - —
Red, light shade, bbls. same basis lb. 1.68 - —
Red, medium shade bbls. same basis lb. 1.83 - —
Red, medium light shade, bbls., same basis lb. 1.76 - —
Red, maroon shade bbls., same basis lb. 1.99 - —
Cadmium selenide lithopone maroon, bbls., frt. alld. E. of Rockies lb. 2.72 - —
Maroon, dark shade bbls. same basis lb. 2.74 - —
Orange, bbls., same basis lb. 1.54 - —
Cadmium-selenide lithopone red, orange-red shade, bbls., same basis lb. 1.68 - —
Red, dark shade, bbls., same basis lb. 2.52 - —
Red, light shade, bbls. same basis lb. 1.84 - —
Red, medium-light shade bbls., same basis lb. 1.96 - —
Red, medium shade bbls., same basis lb. 2.19 - —
Cadmium-selenide, lithopone yellow, all shades, bbls., frt alld. E. of Rockies lb. 1.15 - —
Caffeine, NF, citrated, ums., 100-lb. lots or more lb 2.70 - —
USP, nat., cryst., anhyd., dms., 100-lb lots or more lb. 2.10 - —
cryst., hydrous, dms., 100-lb. lots or more lb. 1.96 - —
USP, syn., anhyd., dms., 100-lb. lots or more lb 2.10 - —
cryst., hydrous, dms., 100-lb. lots or more lb 1.96 - —
Cajuput oil, native cns. lb 1.75 - 2.55
Redist. USP cns lb 1.90 - 2.10
Calamine, USP, dms. lb. .34 - —
Calamus oil, bots lb 12.00 - 20.00
Calciferol cryst., 10-kilo or more lots, works gram .54 - —
1-10 kilo lots gram .55 - —
Calciferol in edible oil (see Viosterol).
Calcium p-aminosalicylate trihydrate fib dms., 100 lbs. or more, frt. adjusted lb 3.10 - —
Calcium arsenate, dealers, bgs., c.l., frt alld lb. .09 - .09¼
bgs. l.c.l. same basis lb. .10 - .10½
Calcium bromide, NF, jars, 100 lbs. or more lb. .97 - —
Calcium carbide standard generator size, 600-lb dms. c.l., dlvd ton 149.00 - —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton 10.50 - —
chalk whiting, 325 mesh, bgs. c.l., works ton 32.00 - 34.00
water-grd., ½ to 10 microns. bgs., c.l., works ton 30.00 - —
10 to 20 microns, bgs., c.l. works ton 17.00 - 18.00
Precip., dense, bgs., c.l., works. ton 30.00 - 35.00
bgs., l.c.l., works ton 45.00 - 50.00
medium, bgs. c.l., works ton 28.00 - —
bgs., l.c.l., works ton 48.00 - —
Precip., surface treated, bgs., c.l., works ton 40.00 - 42.00
bgs., l.c.l., works ton 55.00 - 57.00
ultrafine, bgs., c.l., works ton 117.50 - 167.50
bgs., l.c.l., works ton 137.50 - 187.50



Bromine in Bulk

Saves Dollars! Saves Time!

LOOK AT THESE ADVANTAGES: Thousands of dollars a year can be saved by converting facilities to receive bromine in bulk. For example, with tank car orders, you save 9½¢ a lb. as compared to the drum price; 10½¢ a lb. over bottles. With tank truck orders, you save 7¢ a lb. over drums and 8¢ a lb. over bottle shipments. You will free considerable capital now tied up in container deposits. Finally, you will save both time and money now used in handling the smaller bromine containers.

BULK STORAGE PAYS OFF FAST! If you use as little as 60,000 lbs. of bromine a year, delivered by tank truck, you can save the cost of the necessary 1000 gal. bulk-storage installation in about a year.

Tank cars are available in 60,000 lb. and 100,000 lb. capacities. Tank trucks contain 14,000 lbs. each.

WE CAN SHOW YOU HOW! Our experience in the storage and handling of bromine is extensive and we want to share it with you. If you would like engineering prints, specifications, and technical counsel, get in touch with us. Michigan Chemical also offers you these advantages: A steady, uncommitted supply of bromine at tonnage prices; and a large bromine bulk fleet for prompt service.

Bulk shipments from: El Dorado, Arkansas and Manistee, Michigan. Drums and bottles from Manistee and convenient warehouse locations.

For complete listing of Michigan Chemical products, see your copy of OPD Buyers Directory Issue, Chemical Materials Catalog or Chemical Week Buyers Guide.

MICHIGAN CHEMICAL CORPORATION

643 North Bankson Street, Saint Louis, Michigan

EASTERN SALES OFFICE: 230 Park Avenue, New York 17, N. Y.

C-59-1

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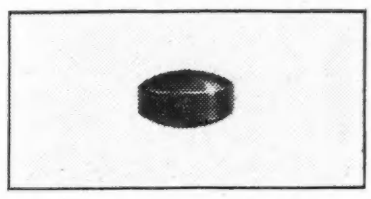
Calcium chloride, flake, 77-80%, paper bgs. c.l., works, frt. equald ton 31.00 - —
Conc., flake or pellet, 94-97%, paper bgs., c.l., works. frt. equald ton 37.80 - —
Calcium chloride, liquor, 40%, tanks, frt. equald ton 12.50 - —
Powd., 77% min., paper bgs., c.l., works, frt. equald ton 37.00 - —
Purif., gran., dms lb .27 - —
Solid, 73-75% dms., c.l., frt. equald ton 29.50 - —
dms., l.c.l., works, frt. equald. ton 36.00 -73.00
USP, gran., dms. lb .32 - —
Calcium chromate, bgs., dlvd lb .37 - —
Calcium cyanide dms., c.l., dlvd E. of Rockies lb .20 - —
dms., l.c.l., same basis lb .24 - .55
Calcium cyclamate 100-lb dms lb 1.95 - —
Calcium gluconate, USP, AA grade, 150-lb. dm., ton lb .73½- —
USP, powd., 150-lb. dm, ton lb .66½- —
Calcium hydride lump dms. works. lb. 2.20 3.00
Calcium hypochlorite, high test, 45-lb cs., dlvd E. of Rockies. cs. 22.95 -25.10
100-lb. dms., same basis dm. 30 80 -34.50
Calcium hypophosphite dms., 1,000-lb lots lb 1.28 - —
Calcium iodide jars lb. 4.52 - —
Calcium lactate, NF, dms., 10,000-lb. lots or more, works lb. .36 - .40
dms., smaller lots, works lb. 41 - .48
Calcium mandelate, USP, 150-lb. dm, works lb. 3.25 - —
Calcium naphthenate, liq., 4% Ca., dms., frt equald lb 30 - —
Calcium pantothenate, USP, 1-kilo or more kilo. 35.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate)
Calcium phenolsulfonate dms lb. 1.24 - 1.25
Calcium phosphate, dibasic, USP, bgs. c.l. frt equald 100 lbs. 8.25 - —
Dibasic, feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton 36.00 - —
bgs. c.l., t.l. f.o.b. Texas City works ton 30.50 - —
bgs., l.c.l., frt. equald ton 96.00 - —
21% P., bgs., c.l., t.l., frt. equald ton 97.65 - —
bgs., l.c.l., frt. equald ton 107.65 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bg., c.l. prices
Calcium phosphate, monobasic, bgs., 10,000-lb. lots, frt. equald, 100 lbs. 7.45 - —
bgs., smaller lots, same basis, 100 lbs. 7.95 - —
Tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs., l.c.l., frt. equald. 100 lbs. 10.00 - —
Calcium phytate bgs., 50 lbs. or more, f.o.b. warehouse N. Y. lb. .39 - —
Calcium resinate precip, dms ton. lots, frt. alld. works lb. .36¼- —
Calcium silicate hydrated bgs., c.l., works lb. .06 - —
bgs., l.c.l., works lb. .06½- —
Calcium silicate, paint grade (see Wollastonite)
Calcium stearate, ctns. c.l. lb. .39 - —
ctns., l.c.l. lb. .40 - .44
Calcium sulfate (see Gypsum)
Calomel NF X powd. 100-lb dms. lb 5.42 - —
Camphene 46° m.p. dms incl., c.l., works lb. .15 - —
dms. incl., l.c.l. same basis lb. .16½- —
tanks, same basis lb. .12½- —
Camphene, chlorinated 67-69% (see Toxaphene)
Camphor, monobromated, NF, dms., kgs lb. 3.63 - 3.70
Nat., USP, powd., cs., 100-lb. lots. lb. .60 - .63
tablets, 1-oz. cs. lb. .85 - .90
USP, gran., bbls., 2,000-lb. lots. lb. .59 - —
Syn., USP gran., powd., bbls., 1,000-lb. lots lb. .60 - —
obls. smaller lots lb. .61 - —
tablets, ctns., 1,000-lb. lots. lb. .85 - —
ctns. 500-lb. lots lb. .86 - —
ctns. smaller lots lb. .87 - —
Syn., tech., 1 bbl. or more lb. .48 - —
Camphor oil, sassafrassy dms. lb. .35 - .55
White, dms lb. .26 - .50
Cananga oil, native, cns. lb. 6.50 - 7.00
Rectified, cns. lb. 7.25 -10.00
Candelilla wax, crude, bgs lb. .60 - .62
Refd., bgs. lb. .65 - .67
Powdered Candelilla wax 20 to 100 mesh, 8c. higher.
Cantharides, Chinese, cs lb 1.23 - —
powd., bxs. lb. 1.75 - —
Russian, bgs. lb. 2.25 - —
powd., bxs. lb. 2.75 - —
Capric acid, dms lb. .35½- .38
tanks lb. .33 - .34½
Capryl alcohol, 85% dms., c.l., and t.l., works lb. .19 - —
dms., t.t.l., same basis lb. .19½- —
tanks, frt. equald lb. .16½- —
Sec. 92-99%, dms., c.l. lb. .22 - —
dms., l.c.l. lb. .23 - —
tanks lb. .19½- —
Caprylic acid, dms lb. .35½- .38
tanks lb. .33 - —
Capsicum (see Pepper red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms lb. 4.00 - —
NF, from African pepper, dms. lb. 4.50 - —
Caraway oil, NF, dms lb. 3.00 - 3.25
Caraway seed, Danish, bgs lb. .12¼- —
Dutch, bgs. lb. .13 - —
Polish, bgs. lb. .12 - —
Carbazole, 97%, bbls., ton lots, works lb 1.05 - —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .07¼- —
bgs., c.l., works lb. .07¾- —
bgs., l.c.l., works lb. .15½- —
Carbon black, furnace, fast extruding, bgs., c.l., works lb. .06¾- —
ctns., l.c.l., whse lb. .13½- —
high abrasion, bulk, c.l., works. lb. .07¼- —
bgs., c.l. works lb. .07¾- —
bgs., l.c.l., dlvd. or whse lb. .14½- —
high modulus, bgs., c.l., works. lb .06¼- —
ctns., l.c.l., whse. lb. .13 - —
semi-reinforcing, bgs., c.l., works. lb. .05¾- —
bgs., ctns., l.c.l., whse. lb. .12½- —
Carbon black, pigment, high color beads, ctns., c.l., works lb. .72 - —
ctns., l.c.l., dlvd. or whse lb. .79 - —
medium color, uncompressed. bgs., c.l., works lb. .13½- —
bgs., l.c.l., dlvd. or whse lb. .22 - —
Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd Metropolitan areas, E. ton 60.00 -115.00
bulk, 3,000,000 lbs. of more, dlvd., Metropolitan areas, E. ton 55.00 - —
Solid, bulk, wholesale, works ton 85.00 - —

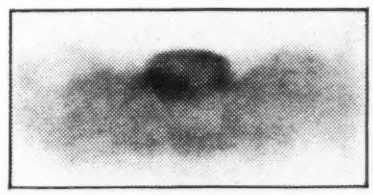
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald to competitive points lb. .071 - —
55-gal. dms., l.c.l., same basis lb. .086 - .091
5-gal. dms., 30 dms. to c.l., same basis lb. .131 - —
5-gal. dms., less than 30 dms., same basis lb. .161 - —
tanks, dlvd. lb. .0545- —
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld lb. .12¾- —
dms., l.c.l., frt. alld lb. .15¼- —
Tech., consumers, dms., c.l., t.l., frt. alld lb. .11¾- —
dms., l.c.l., t.t.l., frt. alld lb. .14¼- —
tanks, frt. alld lb. .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb. lots, works lb. 4.00 - 4.25
dms smaller lots, works lb. 4.10 4.75
Cardamom oil, NF, bots. lb. 40.00 -47.50
Cardamom seed, bleached "A" lb 2.95 - —
Bleached "B" lb 2.95 - —
Decorticated Alleppey, cs. lb. 2.85 - —
Guatemala, cs. lb. 2.85 - —
Green, Alleppey, bgs lb. 2.00 - —
Ceylon, bgs. lb. 2.00 - —
Carmine No. 40, NF, bulk, 100-lb lots or more, dlvd. lb. 16.80 - —
bulk, smaller lots, dlvd. lb. 16.90 -17.30
Carnauba wax, chalky, bgs., ton lots lb. .73 - .75
North country, No. 2, crude, bgs., ton lots lb. .84 - .85
refd., pure, ton lots lb. .94 - .95
North country, No. 3, Ceara, crude, bgs., ton lots lb. .76 - .77
Ceara, refd., pure, bgs., ton lots lb. .85 - .86

Carnauba wax, North country, No. 3, Parnahyba, crude, bgs., ton lots lb. .78 - .80
Parnahyba, refd., pure, bgs., ton lots lb. .85 - .86
Yellow, No. 1, Ceara, bgs., ton lots lb. 1.14 - 1.18
Parnahyba, bgs., ton lots lb. 1.16 - 1.20
Powdered carnauba wax, 20 to 100 mesh, 8c. higher.
Carotene, tech., 1,350,000 A units per gram, tins 5-10 kilo lots, dlvd gram. .20½- —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 - —
USP microcrystalline in oil, 400,000 A units per gram, dms., dlvd million units. .144 - —
b-Carotene in vegetable oil, semi-solid suspension, 400,000 A units per gram cns kilo. 57 60 - —
Liquid in vegetable oil, 500,000 A units per gram cns kilo. 72.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram., cns. kilo. 240.00 - —
Carvol, bots. lb. 5.00 - 5.40
Cascara sagrada bark, bulk lb. .34 - .36
Casein, dom., edible, acid precip., 30 mesh., bgs., 10,000-lb. lots or more, works lb. .56 - —
edible, acid, precip., 80 mesh, bgs., 10,000-lb lots or more, works lb. .64 - —

Casein, imp., inedible, acid-precip., grd., Argentine, bgs., c.l., ex-dock, Eastern seaports lb. .21 - .21¼
New Zealand, bgs., c.l., same basis lb. .25 - —
Cashewnut shell, liquid, treated, dms., c.l., Newark, N. J. lb. .22 - —
dms ton lots same basis lb .23 —
dms. dm lots, same basis lb .25 —
Cassella acid dms. frt alld. 100% basis lb 1 44 1 75
Cassia, Padang, "A," bls lb .30 - —
"B," bls lb .29 - —
"C," bls lb .28 - —
Korintje "A" bls. lb .29 - —
"B," bls. lb .28½ - —
"C," bls. lb .27½ - —
Cassia oil (see Cinnamon leaf oil, USP).
Castor oil, dom., blown dms. c.l. lb. .2550- —
dms., l.c.l. lb .2650- —
dehydrated, bodied, dms. c.l. lb .2700- —
dms., l.c.l. lb .2850- —
tanks lb .2500- —
dehydrated, unbodied, dms., c.l lb .2500- —
dms., l.c.l. lb .2660- —
tanks lb .2360- —
hydrogenated, bgs., c.l. lb. .2450- —
bgs., ton lots lb .2850- —
bgs., l.c.l. dlvd lb .3050- —
No. 1, dms., c.l. lb .2150- —
dms., l.c.l. lb .2250- —
tanks lb .1950- —



It's an enteric coating



and it works

Here is a straight-line approach to the problem of enteric coatings. It does not force you to trust that the human intestine always maintains a certain definite pH. Nor does it put you in the position of assuming that everybody's stomach empties at the same rate of speed.

This coating is made with *Eastman C-A-P Cellulose Acetate Phthalate*. It stubbornly resists the action of gastric juices and erosion from stomach motion. It disintegrates promptly and completely in the small intestine in response to the hydrolytic action of the intestinal esterases. This is unique.

Eastman C-A-P makes smooth, glossy, continuous coatings that dry quickly without pinholes and resist abrasion in tumbling. It is compatible with plasticizers that enhance coating continuity; soluble in many organic solvents. More than a billion doses have been coated with it.

Perhaps this radically different enteric could help you improve a medicament now in production. Maybe the fact that it is available without patent license* puts a new light on products you'd like to reactivate, or new ones you'd like to launch. For data, prices, and help in coating problems, write ***Distillation Products Industries,*** Rochester 3, N. Y. Sales offices: New York and Chicago • W. M. Gillies, Inc., West Coast • Charles Albert Smith Limited, Montreal and Toronto.

*Except in France.

"Eastman" and "C-A-P" are trademarks

DPi

Also ... vitamins A and E ... distilled monoglycerides ... some 3700 Eastman Organic Chemicals for science and industry

Distillation Products Industries *is a division of* **Eastman Kodak Company**

Castor Oil—Citronella Oil

Castor oil, dom., No. 3, tech., dms., c.l.	lb.	.2125-	—
dms., l.c.l.	lb.	.2225-	—
tanks	lb	.1925-	—
refd., deod., dms., c.l	lb.	.2650-	—
dms., l.c.l.	lb.	.2750-	—
USP, dms., c.l.	lb.	.2350-	—
dms., l.c.l.	lb	.2450-	—
tanks	lb	2150-	—
Imported, No. 1, Braz., tanks	lb.	.17¾-	.18
Castor oil, sulfonated, 50%, dms., works	lb	15	.15¼
75%, dms., works	lb.	.19	.19½
Castor oil acids, dehydrated, dms.	lb	44¼	.46¼
Split, dms	lb	37¼	.38¼
Castor pomace, bgs., c.l., works	ton	35.00	—
Castoreum, nat., cns.	lb	5.25	—
Syn., cns.	lb	9.00	—
Catechol, CP, cryst., fib., dms., works	lb.	2 17½-	—
Resin, dms., works	lb	4 29½	—
Catnip leaves, Southern, bls.	lb.	Nom.	
Caustic potash (see Potash caustic).			
Caustic soda (see Soda, caustic)			
Cedarleaf oil USP XIII, cns., dms.	lb.	2.50	3.10
Cedarwood oil, cns., dms.	lb.	.62	.70
Celery seed, French, bgs.	lb	.33	—
Indian, bgs.	lb.	.19	—
Cellulose acetate, flake, powd., bgs., ctns., 100-lb. lots or more, dlvd. E	lb.	.35	.45
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E	lb.	.545	.555
Cellulose acetate, butyrate, powd., 27% butyryl content, bgs., dlvd. E	lb.	.595	.605
38% butyryl content, bgs., dlvd. E	lb.	.545	.555
Cellulose acetate-butyrate, powd., 38% butyryl content half-second, bgs., dlvd. E	lb.	.545	.555
50% butyryl content, bgs., dlvd., E	lb.	.585	.595
Cellulose gum, methyl (see Methyl Cellulose)			
Cellulose gum, pure high vis., bgs., 23,000 lb. lots or more works, frt. alld	lb	.57	—
bgs., smaller lots, same basis	lb.	.59	—
Cerium chloride (see Rare Earth Chloride).			
Cerium chloride 46% dms., dlvd	lb	25	—
Cerium hydrate 74% CeO, fib. dms., 100-lb. lots or more	lb	1.40	—
77% CeO, fib. dms., 100-lb. lots or more	lb	1.74	—
Cerium oxalate (see Rare earth oxalate).			
Cerium oxide, optical grade, bgs., 50-lb. lots or more, dlvd	lb	1.85	1.90
bgs., smaller lots, dlvd.	lb.	2.15	—
Cetyl alcohol NF, fib. cns., c.l., t.l., dlvd. E	lb	.41½-	—
fib. cns., l.c.l., same basis	lb	43½-	—
tanks, same basis	lb	.39	—
Extra, cns., c.l., t.l., dlvd. E	lb.	.48½-	—
fib. cns., l.c.l., same basis	lb	50½-	—
tanks, same basis	lb.	.46	—
Chalk (see Calcium carbonate).			
Chamomile flowers, Hungarian, bls.	lb.	1.25	—
Roman, cs.	lb.	1.50	1.75
Chamomile oil, blue Hungarian, bots	lb	350.00	—
Charcoal, activated, NF, fib. dms., c.l., works	lb.	.25	.32
fib. dms., 5-ton lots, works	lb.	.26½-	.32½
fib. dms., smaller lots, works	lb.	.27	.50
Charcoal, black (see Charcoal, activated).			
Charcoal, bone (see Bone black).			
Charcoal, hardwood lump bulk, c.l., f.o.b. plant	ton.	55.00	—
briquets, bulk, c.l., f.o.b. plant	ton.	78.00	80.00
5-lb. paper bgs., c.l., same basis	ton.	106.00	—
25-lb. paper bgs., c.l., f.o.b. plant	ton.	87.00	—
40-lb. paper bgs., c.l., same basis	ton.	84.00	—
Chenopodium oil NF, cns.	lb.	4.15	5.00
Chicago acid paste, bbls., frt. alld.	lb.	3.21	—
Chinawood oil (see Tung oil).			
Chloral, tech., 94% min., dms., c.l., works	lb.	.23	—
dms., l.c.l., works	lb.	.24	—
tanks, multiple units, 5 cars, works	lb.	.21	—
Chloral hydrate, USP, jars, 1,000-lb. lots	lb	1.00	—
jars, 500-lb. lots	lb	1.03	—
jars, 100-lb. lots or less	lb.	1.05	—
Chlordan, agricultural, dms., c.l., frt. alld	lb.	.65	—
dms., l.c.l., 5,000 to 10,000-lb. lots, frt. alld	lb.	.66	—
Chlordan, clarified, dms., c.l., frt. alld	lb.	.69	—
dms., l.c.l., 5,000-10,000-lb. lots, frt. alld	lb.	.70	—
Chlorinated paraffin, 42%, dms., c.l. frt. alld	lb.	.16¼-	—
dms., l.c.l., 10 dms. or more, same basis	lb.	.17¼-	—
70%, dms., c.l., same basis	lb.	.18½-	—
dms., l.c.l., 10 dms. or more, same basis	lb.	.19½-	—
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works	lb.	.60	—
ctns., l.c.l., works	lb.	.61	—
125, 1,000 cps., ctns., c.l., works.	lb.	.70	—
ctns., l.c.l., works	lb.	.71	—
Chlorine, liq., cyls., c.l., works, frt. equald	lb.	.11	—
cyls., l.c.l., Metropolitan area	lb.	.12½-	.13¾
tanks, single units, works, frt. equald, 100 lbs.		3.15	—
tanks, multiple units, 9 cars, works, frt. equald, 100 lbs.		4.05	—
tanks, multiple units, 4 cars, same basis, 100 lbs.		4.25	—
tanks, multiple units, 2 cars, same basis, 100 lbs.		5.25	5.75
tanks, multiple units, 1 car, same basis, 100 lbs.		6.25	7.25
Chloroacetic acid, mono, flake, 99%, purif., c.l.	lb.	.23½-	.25½
dms., l.c.l.	lb.	.24½-	—
tech. flake, 96-97% dms., c.l., frt. equald	lb	.19	—
dms., l.c.l., frt. equald	lb.	.20	—
2-Chloro-4-aminotoluene tech., liq., dms., frt. alld	lb	1.03	—
4-Chloro-2-aminotoluene fused, bbls.	lb.	1.38	—
6-Chloro-2-aminotoluene tech., liq., dms., frt. alld	lb.	.66	—
m-Chloroaniline, dms., c.l., frt. alld.	lb	.75	—
dms., l.c.l., same basis	lb	.77	—
tanks, same basis	lb.	.73	—
o-Chloroaniline, dms., c.l., frt. alld.	lb.	.52	—
dms., l.c.l., same basis	lb.	.54	—
tanks, same basis	lb.	.50	—
p-Chloroaniline, dms., c.l., frt. alld.	lb.	.77	—
dms., l.c.l., same basis	lb.	.79	—
o-Chlorobenzaldehyde, dms., t.l., works, dlvd. to N.Y. Metropolitan area	lb	1.05	—
dms., l.t.l., same basis	lb	1.20	—
p-Chlorobenzaldehyde, dms., l.c.l., works, dlvd. to N. Y. Metropolitan area	lb.	1.95	—
o-Chlorobenzoic acid, fib. dms., t.l., works	lb.	1.10	—
fib. dms., smaller lots, works	lb.	1.25	—
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works.	lb.	2.25	—
fib. dms., less than 2,000-lbs., same basis	lb.	2.30	—
Chloroform, tech., dms., c.l., dlvd. E	lb.	.18	—
dms., l.c.l., same basis	lb.	.19	—
tanks, same basis	lb.	.17	—
USP, dms., c.l., dlvd.	lb.	.27	—
dms., l.c.l., dlvd.	lb.	.30	—
tanks, minimum 4,000 gals., dlvd.	lb.	.25	—
2-Chloro-4-nitroaniline, paste, dlvd. E, 100% basis	lb.	.81	—
Powd., dlvd. E, 100% basis	lb.	.86½-	—
4-Chloro-2-nitroaniline, powd., dlvd. E	lb.	.80	—
4-Chloro-2-nitrophenol, tech., paste, dms., frt. alld	lb.	.75	—
4-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld	lb.	.99	—
6-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld	lb.	.17	—
o-Chlorophenol, dms., c.l., frt. equald	lb.	.37	—
dms., l.c.l., same basis	lb.	.38	—
p-Chlorophenol, dms., c.l., frt. equald	lb.	.37	—
dms., l.c.l., same basis	lb.	.38	—
Chloropicrin, comi., cyls., 180 lbs., frt. alld	lb.	1.07	—
cyls., 100 lbs., same basis	lb.	1.08	—
cyls., 50 lbs., same basis	lb.	1.14	—
Chlorosulfonic acid, dms., c.l., frt. equald	lb.	.0465-	—
dms., l.c.l., frt. equald	lb.	.0515-	—
tanks, frt. equald	lb.	.0415-	—
Chlorosulfonic acid, in stainless steel dms. ½c. per lb. higher			
o-Chlorotoluene, tech., dms., t.l., works	lb.	.37	—
dms., l.c.l., l.t.l., same basis	lb	.38	—
Choline bitartrate, fib. dms., frt. adjusted	kilo.	2.75	3.00
Choline chloride, fib. dms., frt. adjusted	kilo.	2.75	3.00
Choline dihydrogen citrate, fib. dms., frt. adjusted	kilo.	2.75	3.00
Chrome green, CP, dark, ugnt. medium blue content, 1-15%, bbls., dlvd. E. of Rockies	lb.	.42	—
blue content 16-30%, bbls., same basis	lb.	.42	—
blue content 31-45%, bbls., same basis	lb.	.43	—
blue content 45-49%, bbls., same basis	lb.	.46	—
Reduced color, 25%	lb.	.19	—
Chrome green prices 1c. higher W. of Rockies.			
Chrome orange, CP, bbls., dlvd. E. of Rockies	lb.	.35	—
Chrome orange prices 1c. higher W. of Rockies.			
Chrome yellow, CP, bbls., dlvd. E. of Rockies	lb.	.35	—
Chrome yellow price 1c. higher W. of Rockies			
Chromic acid, 99¾%, dms., c.l., works, frt. equald	lb.	.29½-	—
dms., l.c.l., dlvd. N. Y. Metropolitan area	lb.	.30	.31
Chromic acid, NF (see Chromium trioxide)			
Chromium acetate, soln., 7½%, dms., 500-2,000-lb. lots, works.	lb.	.10	—
Chromium fluoride, bbls., works	lb.	.51	.52
Chromium oxide, hydrated, bbls., fib. dms., c.l., frt. alld	lb	1.20	—
Pure, bgs., c.l., frt. alld.	lb.	.44½-	—
bgs., l.c.l., same basis	lb.	.45¼-	—
Chromium trioxide NF, bots.	lb.	1.15	—
Cinchona bark, NF, red, broken, bgs	lb.	.25	—
NF, yellow, broken, bgs.	lb	.35	.40
Cinnamic acid, refd., bots.	lb	2.50	3.50
Cinnamic alcohol, bots.	lb.	1.75	2.20
Cinnamic aldehyde, dms.	lb	.92	1.25
Cinnamon, Ceylon, No. 2, bgs.	lb.	.69	—
Ceylon, No. "0000," bgs.	lb.	.78	—
Cinnamon bark oil, bots.	lb.	36.00	70.00
Cinnamon leaf oil, crude, dms.	lb.	1.60	2.00
USP (Cassia), cns., dms.	lb	8.50	13.50
Citral, CP, bots.	lb.	3.65	4.00
Extra, bots.	lb.	3.95	5.55
Citric acid, USP, anhyd., fine gran., bgs., dms., c.l.	lb.	.29½-	.30
bgs., dms., 10,000-lb. lots, 1 shipt	lb.	.30	.30¼
bgs., dms., smaller lots	lb.	.30½-	.31
USP, hydrous, fine gran., bgs., dms., c.l.	lb.	.27½-	.28
bgs., dms., 10,000 lb. lots, 1 shipt	lb.	.28	28¼
bgs., dms., smaller lots	lb	29	29¼
Powdered citric acid ½c. per lb. higher			
Citronella oil, Ceylon, dms.	lb.	.80	1.05
Java-type, dms.	lb.	.80	1.20

Citronellal, bots., dms.	lb.	1.60	- 2.10
Citronellol, bots., dms.	lb.	2.30	- 3.70
Civet, artif., bots.	lb.	13.75	-15.00
Nat., bots.	oz.	8.50	-15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn	ton.	17.50	-21.50
crushed, shed moisture, bulk, c.l. Tenn	ton.	8.00	-11.00
Clay, ball, imp., airfloated, bgs. c.l., Atl. port	net-ton.	42.00	-45.75
lump, bulk, Atl. port	net-ton.	29.50	-35.75
Clay, China, dom., dry-grd., air-floated, 99%, 325 mesh, Georgia, bgs., c.l., works.	ton.	10.00	-12.00
Georgia, bgs., l.c.l. works	ton.	15.50	- —
China, dom., airfloated, 99%, 300 mesh bgs., c.l., Georgia, works	ton.	13.50	-14.50
bgs., l.c.l., ex-whse	ton.	35.00	-36.00
China, imp., white, lump, bulk, c.l., ex dock, Philadelphia, Portland, Me	long-ton.	20.00	-35.00
white, powd., bgs., c.l., ex dock.	net-ton.	50.00	- —
bgs., l.c.l., ex whse	net-ton.	60.00	-70.00
Cleaners Naphtha, petroleum, 105°F Flash, tankcars, New Jersey and New York	gal.	.18	- —
Group 3	gal.	.12875-	—
Houston, Texas	gal.	.145	- —
140°F Flash, tankcars, New Jersey or New York	gal.	.205	- —
Group 3	gal.	.154	- —
Houston, Texas	gal.	.17	- —
Cleve's acid, tech., mixed, solid, dms., frt. alld	lb.	1.05	- —
Cleve's acid, 1,6, tech. solid, dms., frt. alld	lb.	.77	- —
1,7, tech., dms., frt. alld.	lb.	2.20	- —
Cloves, Madagascar, bgs	lb.	.40½-	—
Zanzibar, bgs.	lb.	.42½-	—
Clove bud oil, USP, dms	lb.	2.70	- 3.60
Clove leaf oil, crude, dms	lb.	1.35	- 1.80
CMC, crude, 96.4% low or medium vis. bgs. or fib. dms., 23,000 lbs., dlvd. E., 100% basis	lb.	.41½-	—
96.4% low. or medium vis., bgs. or fib. dms., 23,000 lbs. dlvd. E., 100% basis	lb.	.43½-	—
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis	lb.	.41½-	—
bgs. or fib. dms., l.c.l., dlvd. E., 100% basis	lb.	.43½-	—
CMC, purif. high vis. (see Cellulose gum).			
CMC, standard, low or medium vis., bgs., 23,000 lbs., works, frt. alld	lb.	.57	- —
bgs. smaller lots, same basis.	lb.	.59	- —
CMC prices W. of the Rockies are 2c. per lb. lower and are on a works basis.			
Coaltar, crude, resale for solns., tanks, works	gal.	.17	- —
Refd., resale, indust., dms., c.l., ex whse	gal.	.35	- —
dms., l.c.l., ex whse.	gal.	.39	- —
tanks works	gal.	.20½-	—
Coaltar pitch, aluminum, bulk, works	ton.	44.00	- —
Carbon and indust., bulk, works.	ton.	44.00	- —
Core, bulk, works	ton.	40.50	- —
Fiber, bulk, works	ton.	48.00	- —
Roofing, 140-155°F., Federal Specification RP-381 Type 1, tanks, works	ton.	41.00	- —
Cobalt acetate, 23.7% Co., dms. dlvd	lb.	1.04	- —
Cobalt blue genuine 250 lb. bbls., dlvd. E. of Rockies	lb.	4.90	- —
Cobalt blue prices 1c. higher W. of Rockies.			
Cobalt blue, imitation (see Ultramarine blue).			
Cobalt carbonate, 48% Co., powd., bgs., dlvd	lb.	1.45	- —
Cobalt chloride, 24.2% Co., dms., dlvd	lb.	.99	- —
Cobalt hydrate, 60-61% Co., dms., dlvd	lb.	2.05	- —
Cobalt linoleate, fused 8½% Co., dms	lb.	.71½-	—
Liq., 6% Co. dms.	lb.	.57½-	—
Cobalt metal, 97-99%, dms., f.o.b. carrier	lb.	1.75	- —
Cobalt naphthenate, liq., 6% Co., dms. dlvd	lb.	.48¾-	—
Cobalt nitrate, 20.1% Co., bbls., dlvd.	lb.	.80	- —
Cobalt oxide, black, ceramic grade, 72½-73½% Co., kgs., dlvd. E. of Mississippi R	lb.	1.33	- —
70-71% Co. kgs. same basis.	lb.	1.29	- —
Cobalt oxide prices W. of Mississippi R. 3c. per pound higher.			
Cobalt phosphate, powd., 32.1% Co., dms., dlvd	lb.	1.35	- —
Cobalt resinate, fused, 3% Co., dms.	lb.	.29½-	—
Cobalt sulfate, cryst., 21% Co., dms. dlvd	lb.	.64	- —
Monohydrated, 33% Co., dms., dlvd	lb.	1.09	- —
Cobalt tallate, 6% Co., dms., dlvd.	lb.	44	- —
Cocaine, USP, cns., 100-oz. lots	oz.	17.80	- —
Cocaine hydrochloride, cns., 100-oz. lots	oz.	13.75	- —
Cocillana bark, bls	lb.	.20	- .22
Cocoa butter, bgs.	lb.	.63	- .68
Coconut oil, crude, tanks, New York.	lb.	.18⅛-	.18¾
tanks, Pac. coast	lb.	.17	- —
Refd., deodorized, dms	lb.	.25	- .26
Coconut oil acids, dist., dms.	lb.	.30½-	.33
tanks	lb.	.28	- —
Double dist. (stripped), dms.	lb.	.31½-	.34
tanks	lb.	.29	- —
Cod oil, dms., spot	lb.	.08¼-	.08⅜
Codeine, NF, cns., 100-oz lots	oz.	13.25	- —
Codeine hydrochloride, cns., 100-oz. lots	oz.	11.75	- —
Codeine phosphate, USP, cns., 100-oz. lots	oz.	10.25	- —
Codeine sulfate, USP, cns., 100-oz. lots	oz.	10.75	- —
Codliver oil, USP, dms.	gal.	1.40	- 1.70
Cohosh root, black, bls.	lb.	.20	- .22
Blue, bls	lb.	.20	- .22
Colchicine, USP, bots.	oz.	27.00	- —
Colchicum root, bls	lb.	.30	- .35
Colchicum seed, bgs.	lb.	.60	- .65
Collodion USP, dms.	lb.	.32½-	—
USP, flexible, dms.	lb.	.34	- —
Colocynth pulp, bls	lb.	.75	- —
Colombo root, bls	lb.	.16	- .18
Condurango bark, bls.	lb.	.26	- —
Congo copal gum, No. 1, bgs	lb.	.25	- .26
No. 2 bgs.	lb.	.22	- .24
No. 3, bgs.	lb.	.16½-	.19
Copaiba balsam, cns., dms	lb.	.55	- —
Copaiba oil, cns.	lb.	1.35	- 2.00
Copper acetate, bbls., c.l., works.	lb.	.53	- —
bbls., l.c.l., works	lb.	.54	- —
Copper carbonate, 55%, bgs., c.l., works	lb.	.3635-	—
bgs., l.c.l., works	lb.	.3785-	—
Copper chloride, cupric, anhyd., dms., works	lb.	.45½-	46
Cryst., dihydrate dms works	lb.	.41	- —
Cryst., dried, dms., works	lb.	39¼-	.39¾
Copper chloride, cuprous, dms., works	lb.	.4135-	.4435
Copper cyanide, tech., dms., 20,000-lb lots or more	lb.	.609	- —
dms., 1,000-lb. lots or more	lb.	.619	- —
dms., smaller lots	lb.	.639	- .65
Copper gluconate, dms.	lb.	3.20	- —
Copper hydrate dms., c.l., frt. alld. E. of Miss	lb.	.51¾-	—
dms., l.c.l., same basis	lb.	.52¼-	—
Copper metal, electrolytic, dlvd. Valley basis	lb.	.33	- .36
Copper naphthenate, liq., 8% Cu, dms., frt alld	lb.	.26½-	—
Copper nitrate, tech., cryst., dms., works	lb.	.30¾-	.32⅞
Copper oleate, solid, 9% Cu, dms., works	lb.	.43	- —
Copper oxide, black, bbls., 100-5,000-lb. lots, works	lb.	.49¼-	—
Copper oxide, red, 97%, USN Type 1, bbls., 100-5,000-lb. lots.	lb.	.50½-	—
90%, USN Type II, bbls., 100-5,000-lb. lots or more, works.	lb.	.48½-	—
Copper quinolinolate, 18% Cu, dms., ton lots	lb.	4.25	- —
10% active quinolinolate, dms	lb.	1.14	1.15
Copper resinate, precip, dms., frt. alld	lb.	.36½-	—
Copper sulfate, CP, gran., dms., works	lb.	.1863-	—
CP, cryst., 99%, bgs., c.l., works.	100 lbs.	12.75	-13.00
bgs., l.c.l., works	100 lbs.	13.25	-15.75
Copper sulfate, monohydrated, 35%, dms., c.l., works.	100 lbs.	24.00	- —
dms., l.c.l., works	100 lbs.	24.75	- —
Copper sulfate, tribasic distributors, bgs., c.l., works.	100 lbs.	29.60	- —
bgs., l.c.l., works	100 lbs.	31.10	- —
Copper undecylenate, dms.	lb.	2.75	- —
Copra, Atl., Gulf ports, c.i.f.	ton.	230.00	- —
Pac. ports, c.i.f.	ton.	225.00	- —
Coriander oil, USP, bots	lb.	9.00	-10.00
Coriander seed, Moroccan, bgs	lb.	.08	- —
Rumanian, bgs.	lb.	.07½-	—
Yugoslavian, bgs.	lb.	.08½-	—
Corn oil, crude, tanks, works	lb.	.11⅝-	—
Foots (soapstock) acid 95%, tanks, New York	lb.	.04¾-	—
Refd., salad, dms.	lb.	.1735-	.1760
tanks	lb.	.1535-	—
Corn oil, acids, dist., dms.	lb.	.16¾-	.19¼
tanks	lb.	.14¼-	—
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min.	100 lbs.	7.30	- —
paper bgs., l.c.l	100 lbs.	7.45	- —
Corn syrup, 42° Be., non-ret. dms., c.l	100 lbs.	7.31	- —
non-ret. dms., l.c.l.	100 lbs.	7.46	- —
Corrosive sublimate (see Mercuric chloride).			
Cortisone acetate, USP, bots., kilo or more	gram.	1.15	- 1.20
Costus oil, bots.	oz.	6.00	- —
Cottonseed meal, 41%, bgs., Memphis	ton.	64.00	- —
Cottonseed oil, crude, tanks, South East	lb.	.09½-	.09¼
tanks, Valley	lb.	.08¾-	—
tanks, Texas, Lubbock	lb.	.08¾	Nom.
tanks, Texas, Waco	lb.	.09	- —
Foots, (soapstock), acid 95%, tanks, New York	lb.	.04	- —
Refd., salad, dms.	lb.	.14½-	.14¼
tanks	lb.	.12½-	—
Cottonseed oil acids, dist., dms	lb.	.16¾-	.19¼
tanks	lb.	.14¼	—
Coumarin, NF, cryst., dms.	lb.	3.60	- 3.70
Cramp bark, NF, bls.	lb.	.90	- 1.00
Cream of tartar (see Potassium bitartrate).			
Creosote carbonate, NF bots chys.	lb	3.05	3.26
Creosote, coaltar, crude, tanks, works, frt adjusted	gal.	24	- —
Crude, soln. 80%, tanks, works.	gal	226	- —
Refd., dms., c.l., works	gal.	.50	- —
dms., l.c.l., same basis	gal.	62	- —
tanks, same basis	gal	38	- —
West Coast creosote prices computed on a basis of 24c per gallon for straight oil and 20c per gallon for coaltar.			
Creosote oil (see Creosote coaltar).			
Creosote, beechwood, chys., dms., f.o.b. works dlvd in Metropolitan area	lb	1.72	1.77
Hardwood, NF, chys. dms. same basis	lb	1.42	1.47
Pinewood, dms., incl., c.l., works	lb	.0561-	—
dms incl., l.c.l. works	lb.	.0634-	—
dms. incl. l.c.l., ex whse, New York	lb	.0745-	—
tanks, works	lb.	.0460-	—
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms c.l. frt alld	lb	.16¼-	—
Tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., l.c.l., same basis	lb.	.17½-	—
tanks, same basis	lb.	.145	—

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Completely free of volatile solvents
uniform and stable water dispersions
of very finely divided Metal Naphthenates
MELETEX Driers
exceedingly effective and readily used
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to meet modern demands for high quality films:

MELETEX COBALT	5%*
MELETEX LEAD	20%*
MELETEX MANGANESE	5%*

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*Pat. Pending

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Cresol—Di-sec-amyl Phenol

Cresol, USP, non-ret. dms., c.l., same basis lb .18 • —
non-ret. dms., t.c.l., same basis lb. .19 • —
tanks, same basis lb. .16 • —
m-Cresol 95-98% dms. c.l., works. lb. .60 • —
dms., t.c.l., works lb. .61 • —
m-p-Cresol 5-95% 3°C., dms., c.l., frt. equald lb. .18 • —
dms., t.c.l., same basis lb. .19 • —
tanks, same basis lb 18 • —
2,97% 2°C., dms., c.l., frt. equald. lb. .22 • —
dms. t.c.l. same basis lb .23 • —
tanks, same basis lb .20 • —
o-Cresol 30.5°C m p and over, ret. dms c.l., frt equald lb. .17 • —
ret. dms., t.c.l., same basis lb. .18 • —
tanks, same basis lb .15 • —
30°-30.49°C. m.p., dms., c.l., frt. equald lb. .16½- —
ret. dms., t.c.l., same basis lb. .17½- —
tanks, same basis lb. .14½- —
29°-29.9°C. m.p., dms., c.l., frt. equald lb. .16 • —
ret. dms., t.c.l., same basis lb. .17 • —
tanks, same basis lb .14 • —
25°-28°C. m.p., dms., c.l., frt. equald lb. .15 • —
ret. dms., t.c.l., same basis lb. .16 • —
tanks, same basis lb. .13 • —
p-Cresol, 98%, dms., c.l., dlvd lb. .52 • —
dms., t.c.l., dlvd. lb. .53 • —
tanks, dlvd. lb. .49 • —

2,3-Cresotic acid, dms., ton lots, works lb. .70 • —
dms., smaller lots, works lb. .72 • —
p-Cresyl methyl ether, cns. lb. 1.80 - 2.05
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt. equald gal 1.35 • —
dms., t.c.l., same basis gal. 1.40 • —
tanks, same bassi gal. 1.15 • —
Cresylic acid, coaltar, dom., meta-para content 25% or less, dms., c.l., t.l., same basis gal 1.20 • —
dms., t.c.l., same basis gal. 1.25 • —
tanks, frt. equald gal. 1.00 • —
Cresylic acid, coaltar, imp., meta-para content, 25% or less, f.o.b works, frt. equald, to competitive points, 50 dms. or more gal. 1.03½- —
less than 50 dms., same basis gal. 1.05 - 1.15
tanks, same basis gal. 1.00 • —
Crotonaldehyde, 91-93%, dms., l.c.l., works lb. .25 • —
Crotonic acid, dms., 200 lbs. or more, l.c.l., works lb. .51 • —
Cryolite, nat., indust., bgs., c.l., works 100 lbs.13.00 • —
bgs., t.c.l., works 100 lbs.14.25 • —
Cube root, powd., 5% rotenone, bgs., t.l., works lb. .21 • —
bgs., l.t.l., works lb. .22 • —

Cubeb berries, NF, bgs. lb 1.00 • —
Powd., cs. lb. 1.15 • —
Cubeb oil, cns. lb.12.00 -16.00
Cumene, dms., c.l., works lb. .12 • —
dms., t.c.l., works lb. .14 • —
tanks works lb. .11 • —
Cumin seed Iranian, bgs. lb. .30 • —
Moroccan, bgs. lb. .31 • —
Turkish, bgs. lb. .27 • —
Cumin seed oil, bots, cns. lb.15.50 -17.00
Cyanamide, fertilizer, mixing grade, 21% N gran. bgs., Niagara Falls, Ont., contract ton.57.00 • —
Fertilizer, pulv., 21% N, bgs., works, unit-ton 2.85 • —
Indust. grade, bgs., c.l., works.ton.75.00 • —
bgs. t.c.l. works ton.96.00 • —
Indust. grade, 6-16 mesh, dms., c.l. works ton.120.00 • —
dms., t.c.l., works ton.140.00 • —
Cyclohexane, 99% tech., dms., c.l., dlvd E of Rockies gal. 1.02 • —
dms., t.c.l., same basis gal. 1.10 • —
dms., c.l., dlvd. W of Rockies gal. .77 • —
dms., t.c.l., same basis gal. .85 • —
tanks, works gal. .55 • —
98%, tech., dms., c.l., f.o.b. works, lb. .62¼- —
dms., t.c.l., same basis lb. .66½- —
tanks, same basis lb. .40 • —
Cyclohexanol, tech., dms., c.l., works, frt alld. E lb. .28½- —
dms., t.c.l., works, same basis. lb. .29½- —
tanks, works, same basis lb. .26 • —
Cyclohexanone, tech., dms., c.l., works lb. .33½- —
dms., t.c.l., works lb. .34½- —
tanks, works lb. .31 • —

Cyclohexylamine, dms., c.l., works. lb. .49 • —
dms., t.c.l., works lb. .50 • —
tanks, works lb. 47 • —
Cyclopropane, CP, 2-lb. cyls., works, cyl.48.00 • —
6-oz cyls., works cyl.12.00 • —
USP, hospitals, cyls., 40-gal. lots. gal. .42 • —
cyls., 100-gal lots gal. .41 • —
cyls., 200-gal. lots gal. .40 • —
Cypress oil, bots. lb 5.30 • —

D

2,4-D tech. bgs., dms., c.l., works, frt equald lb. .40 • —
bgs., dms., t.c.l., same basis lb. .45 • .49
2,4-D butyl ester, dms. c.l. works. lb. .43 • —
dms., t.c.l., same basis lb. .48 • .52
tanks, same basis lb. .42 • —
2,4-D isopropyl ester, dms., c.l., works lb. .43 • —
dms., t.c.l., works lb .48 • .52
tanks, works lb .42 • —
Dammar gum, Batavia A E, cs lb No stocks.
East India, Batu bold bgs. lb .14¼ .16½
nubs and chips, bgs lb. .08½- .09½
black, bold bgs lb 14½ .16½
nubs and chips bgs lb 12¼ .13½
unscraped bgs lb 13 .14½
pale, chips, bgs lb 14½- .16
nubs and chips, bgs. lb .09 - .10
Siam, cs. lb .30 - .33
Singapore No. 1 bgs lb .36 - .41
No 2, bgs lb .29 - .32
No. 3, bgs lb No stocks.
dust, bgs. lb .17 - .19
Dandelion root, bls. lb .28 - .32
DDD, tech., flake, grd., fib. dms., c.l. works lb. .45 - .47
fib. dms., t.c.l., works lb. .46 - .48
DDT, flake or lump, bgs., c.l., dlvd lb. .23 • —
bgs., smaller lots same basis. lb. .25 • —
fib dms., c.l., same basis lb. .24 • —
fib. dms., smaller lots, same basis lb. .26 • —
Powdered DDT 1c. per pound higher.
1-Decanol, tech., dms., c.l., dlvd E. lb. .43½- —
dms., t.c.l., dlvd. E lb. .45½- —
tanks, dlvd. E lb. .41 • —
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb. .23½- —
dms., t.c.l., dlvd lb. .25 • —
tanks, dlvd lb 21 — —
Perfume grade, bots lb. 1.60 - 2.00
Decyl alcohol, normal (see 1-Decanol)
Deertongue leaves, bls lb. .55 - .60
Defluorinated phosphate, feed grade 13% P, paper bgs., c.l. t.l., works ton.53.00 • —
18% P, paper bgs., c.l., works ton.66.25 -71.60
19% P, paper bgs. works, Houston, Tex., c.l., t.l. ton.74.35 • —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices
Degras, common, bbls lb. .10 • .12
Neutral, bbls. lb. .21 • .23
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd. E. of Rockies gal. .69½- —
dms., t.c.l., same basis gal. 74½- .80½
tanks, dlvd., same basis gal. .53½- —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division
Denatured alcohol ethyl, proprietary solvent, dms., c.l., dlvd. E. of Rockies gal. 72 • —
dms., t.c.l., same basis gal. 77 • .83
tanks, same basis gal. 56 • —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1 dms., dlvd. E of Rockies gal. .70½- —
dms., t.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —
SD2B, dms., c.l., dlvd. E of Rockies gal. .69 • —
dms., t.c.l., same basis gal. .74 • .80
tanks, same basis gal. .53 • —
SD3A, dms., c.l., dlvd. E of Rockies gal. .68 • —
dms., t.c.l., same basis gal. .73 • .79
tanks, same basis gal. .52 • —
SD23A, dms., t.c.l., dlvd E of Rockies gal. .70½- —
dms., t.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .71 • —
dms., t.c.l., same basis gal. .76 • .82
tanks, same basis gal. .55 • —
SD29, dms, c.l., dlvd. E. of Rockies gal. .69½- —
dms., t.c.l., same basis gal. .74½- .80½
tanks, same basis gal. .53½- —
SD30, dms., c.l., dlvd. E. of Rockies gal. .68 • —
dms., t.c.l., same basis gal. .73 • .79
tanks, same basis gal. .52 • —
SD-35A, dms., c.l., dlvd. E. of Rockies gal. .71 • —
dms., t.c.l., same basis gal. .76 • .82
tanks, same basis gal. .55 • —
SD-40, dms., c.l., dlvd. E. of Rockies gal. .70½- —
dms., t.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —
For anhyd. alcohol on above formulas prices are 7c. per gal. higher
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c differential on tankcars is maintained
d-Desoxyephedrine hydrochloride, dms lb.15.00 -17.00
dl-Desoxyephedrine hydrochloride, dms lb 6.50 • —
Dextrin, corn, gum, paper bgs., c.l., 100 lbs 9.38 • —
paper bgs., t.c.l 100 lbs 9.53 • —
canary dark, paper bgs., c.l. 100 lbs 9.22 • —
paper bgs., t.c.l 100 lbs 9.37 • —
indust. grade 6-16 mesh, dms., canary light paper bgs. c.l., 100 lbs 9.12 • —
paper bgs., t.c.l 100 lbs 9.27 • —
white, paper bgs., c.l 100 lbs 8.96 • —
paper bgs., t.c.l 100 lbs 9.11 • —
Corn dextrin in cotton bgs. 15c. per 100 lbs. higher
Dextrose, anhyd., coml., bgs., c.l., 100 lbs. 8.80 • —
bgs., t.c.l. 100 lbs. 8.95 • —
Anhyd., special, aluminum foil lined fib. dms., 200-lb. dms 100 lbs.14.70 • —
100-lb. dms. 100 lbs.15.20 • —
Hydrated, coml., bgs., c.l., ex whse 100 lbs. 7.80 • —
bgs., t.c.l., ex whse 100 lbs. 7.95 • —
USP, dms. lb. .19¾- —
Diacetyl, flavor grade, bots lb. 4.30 4.55
Di-sec-amyl phenol, dms., c.l., works lb. .32 • —
dms., t.c.l., works lb. .33 • —
tanks, works lb. .29½- —

There's a USS steel container to meet almost every shipping need

Whatever you ship—paint, chemicals, petroleum, food—wherever it goes, its quality is secure in a USS steel container. USS steel drums and pails are precision-fabricated of carbon or stainless steel and fitted with any standard closure. Carbon steel containers are rust-inhibited, inside and out, and specified linings can be applied to protect your product's purity. Complete facilities are available to decorate containers with any design in bright, durable colors to your specifications. Call the USS man at one of the plants or offices listed below. He can help you select the right steel shipping containers for your product. Delivered where and when you need them.

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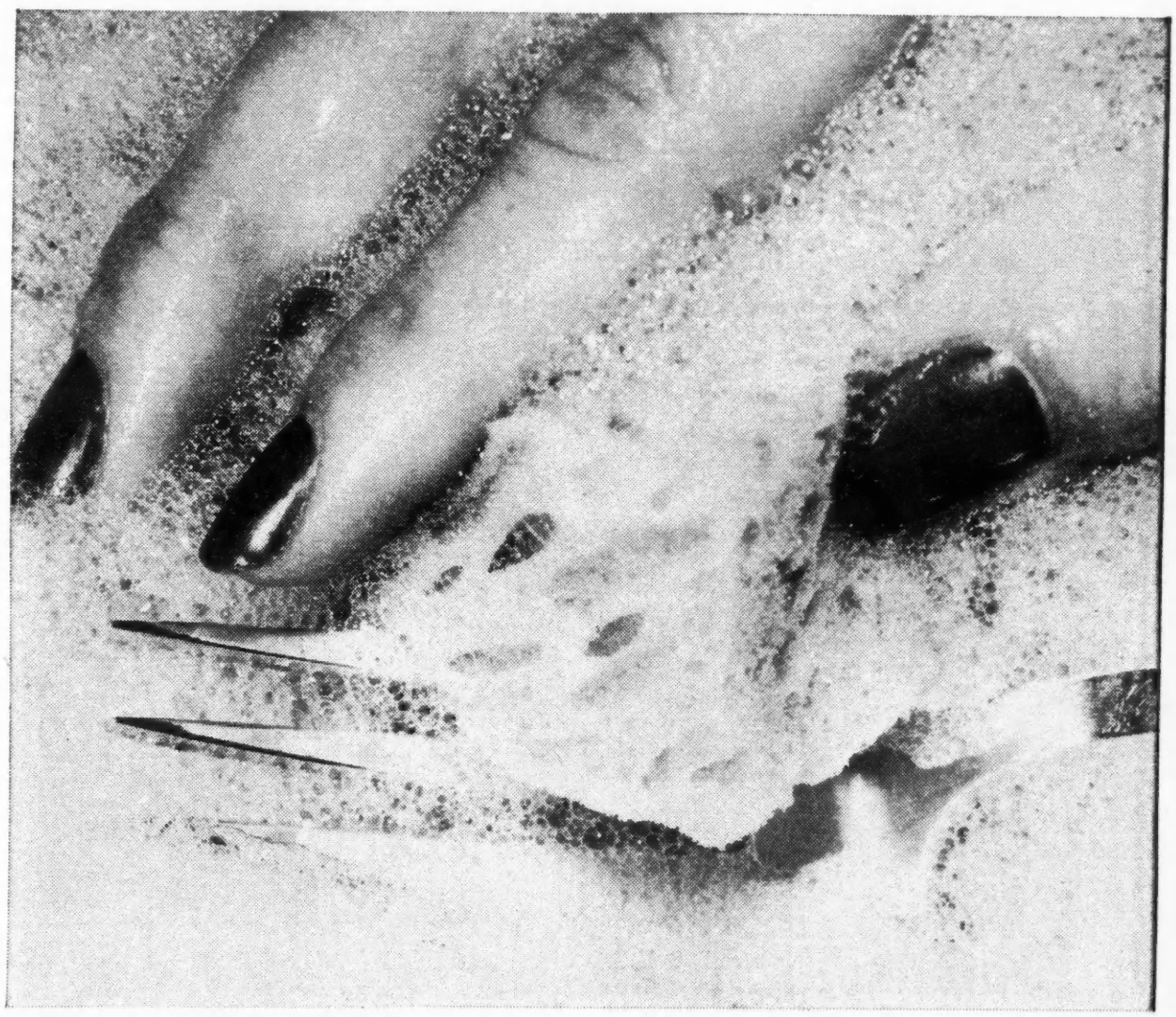
United States Steel Products Division of United States Steel

USS TRADEMARK

Di-tert-amyl phenol, dms., c.l., works lb. .32 - —
dms., l.c.l., works lb. .33 - —
tanks, works lb. .29½- —
Diacetone alcohol, acetone-free, dms., c.l., dlvd lb. .15½- —
dms., l.c.l., dlvd lb. .17 - —
tanks, dlvd lb. .13 - —
Diacetone alcohol, tech., dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd lb. .16½- —
tanks, dlvd. lb. .12½- —
Diallylamine, dms., c.l., dlvd lb. 98½- —
dms., l.c.l., dlvd lb. 1.00 - —
tanks, dlvd. lb. .96 - —
o-Dianisidine dry, tech., fib. dms. lb 2.00 - —
Dibenzyl sebacate dms. c.l., works. lb. .93 - —
dms., l.c.l. same basis lb. .94 - —
tanks, same basis lb .91 - —
Dibromobenzene bgs, 500-lb lots. lb .55 - —
2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms., dlvd lb. .65 - —
l.t.l., dms., same basis lb. .68 - —
Food grade, c.l., t.l., dms., dlvd. lb. .65 - —
dms., l.t.l., same basis lb. .68 - 1.10
Tech., dms., c.l., t.l., dlvd lb. .57 - —
dms., l.c.l., same basis lb. .60 - —
tanks, same basis lb. .54 - —
Dibutyl fumarate dms., c.l., t.l., dlvd. E lb. .31½- —
dms., l.c.l., t.l., dlvd. E lb. .33 - —
tanks, dlvd. E lb. .29 - —
Dibutyl maleate dms. c.l., t.l., dlvd. E lb. .31½- —
dms., l.c.l., t.l., dlvd. E lb. .33 - —
tanks, dlvd. E lb. .29 - —
Dibutyl phthalate, dms., c.l., dlvd. E. lb. .28½- —
dms., l.c.l. same basis lb. .30 - —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —
Dibutyl sebacate, dms., c.l., works. lb. .67½- —
dms., l.c.l., works lb. .68½- —
tanks, works lb. .65½- —
Dibutyl tartrate, dms., works, frt. alld lb. .65½- —
Dibutylamine, dms. c.l., dlvd lb. .55½- —
dms., l.c.l., same basis lb. .57 - —
tanks, same basis lb. .53 - —
Dicapryl phthalate, dms., c.l., dlvd. lb. .27½- —
dms., l.c.l., dlvd. lb. .29 - —
tanks, dlvd. lb. .25 - —
Dicapryl sebacate, dms., c.l., works. lb. .63 - —
dms., l.c.l., works lb. .63½- .64
tanks, works lb. .61 - —
2,5-Dichloroaniline, dms., works lb. .83 - —
3,4-Dichloroaniline, tech., solid, tanks, frt. alld lb. .73 - —
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¾- —
dms., l.c.l. same basis lb. .13¾- —
tanks, same basis lb. .11 - —
p-Dichlorobenzene, dms., c.l., f.o.b., works, frt. alld. E lb. .12 - —
dms. 2,000 lbs. or more same basis. lb. .14½- —
1,4,-Dichlorobutane, dms., c.l. or t.l., works lb. .33½- —
dms., l.c.l., or t.t.l., works lb. .34 - —
tanks, works lb. .32 - —
Dichlorodiphenyltrichloroethane (see DDT).
2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd. E lb. .15½- —
dms., l.c.l., t.t.l., same basis lb. .17 - —
tanks, same basis lb. .13 - —
Dichloropentanes, dist., dms., c.l., works lb. .05 - —
dms., l.c.l., works lb. .06 - —
tanks, works lb. .03 - —
Dichlorophenoxyacetic acid (see 2,4-D).
Dicyclohexylamine dms., c.l., works. lb. .54 - —
dms., l.c.l. works lb. .55 - —
tanks, works lb. .52 - —
Dicyclohexyl phthalate, gran., fib. dms., c.l., works, frt. alld. lb. .46½- —
fib. dms., l.c.l., same basis lb. .48 - —
Didecyl phthalate, dms., c.l., works. lb. .28½- —
dms., l.c.l., same basis lb. .30 - —
tankcars, tanktrucks, 2,000 gals., lb. .26 - —
tanktrucks, 1,000-1,999 gals, same basis lb. .26½- —
Dieldrin, dms., c.l., dlvd lb. 1.85 - —
dms., l.c.l., dlvd lb. 1.90 - —
Diethanolamine, dms., c.l., dlvd. E. lb. .27 - —
dms., l.c.l., same basis lb. .28½- —
tanks, same basis lb. .24½- —
Diethanolamine lauryl sulfate, dms., c.l., frt. alld lb. .27½- —
dms., l.t.l., frt. alld lb. .28½- —
tanks, frt. alld lb. .26½- —
Diethyl barbituric acid (see Barbital)
dms., l.t.l., same basis lb. .18½- —
Diethyl carbonate, dms., c.l., f.o.b. works lb. .47½- —
dms., l.c.l. same basis lb. .48½- —
tanks, same basis lb. .45 - —
Diethyl ethanolamines, dms., c.l., dlvd lb. .69¼- —
dms., l.c.l., dlvd. lb. .71 - —
tanks, dlvd. lb. .67 - —
Diethyl oxalate, dms., c.l., f.o.b. works lb. .42½- —
dms., l.c.l., same basis lb. .43½- —
tanks, same basis lb. .40 - —
Diethyl phthalate, dms., c.l., dlvd. lb. .27½- —
dms., l.c.l., dlvd lb. .29 - —
Diethyl phthalate, tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —
tankcars, tanktrucks, 2,000-lb. lots, same basis lb. .26 - —
Diethyl sulfate dms. c.l. works lb. .19½- —
dms., l.c.l., works lb. .20¼- —
tanks, works lb. .17½- —
Diethyl toluamide, 90-95% meta isomer dms., c.l., t.l., works lb 2.30 - —
5-44 dm lots, works lb 2.35 - —
1-4 dm lots, works lb 2.40 - —
N,N-Diethyl-m-toluidine tech., liq., tanks, frt. alld lb .83 - —
Diethylamine dms., c.l., dlvd. E lb. .52 - —
dms., l.c.l. same basis lb. .53½- —
tanks, same basis lb. .49½- —
N,N-Diethylaniline dms., c.l., frt. alld lb. .57 - —
dms., l.c.l., same basis lb. .58 - —
tanks, same basis lb. .55 - —
Diethylbenzene, dms., t.l., frt. alld. lb. .16½- —
Di-2-ethylhexyl adipate (see Dioctyl adipate)
Di-2-ethylhexyl phthalate (see Dioctyl phthalate).
Diethylene glycol, dms., c.l. dlvd. E lb. .17¾- —
dms., l.c.l., same basis lb. .19¼- —
tanks, same basis lb. .15¼- —
Diethylene glycol diethyl ether, dms., c.l., works lb. .51½- —
dms., l.c.l., works lb. .52¼- —
Diethylene glycol monobutyl ether, c.l. dms., works lb. .30¾- —
dms., l.c.l., works lb. .32¼- —
tanks, dlvd. E lb. .28¼- —
Diethylene glycol monobutyl ether acetate, dms., c.l., works lb. .30¾- —
dms., l.c.l., works lb. .31½- —
tanks, dlvd. E lb. .28¾- —
Diethylene glycol monoethyl ether, dms., c.l., dlvd lb. .22½- —
dms., l.c.l., dlvd lb. .24 - —
tanks, dlvd. E lb. .20 - —
Diethylene glycol monoethyl ether acetate dms., c.l., works lb. .27¼- —
dms., l.c.l., works lb. .28 - —
tanks, works lb. .25¼- —
Diethylene glycol monomethyl ether, dms., c.l., dlvd lb. .21 - —
dms., l.c.l., dlvd lb. .22½- —
tanks, dlvd. E lb. .18½- —
Diethylenetriamine, dms., c.l., dlvd. E lb. .44 - —
dms., l.c.l., dlvd E lb. .45½- —
tanks, dlvd. E lb. .41½- —
Diethylstilbestrol USP bots, 10-kilo lots kilo 100.00 - 147.50
bots. 1-kilo lot kilo 110.00 - 152.50
Digitalis leaves, USP, dom., dms. lb. 1.25 - —
Digitoxin USP bots gram 4.75 - —
Diglycol laurate dms lb. .32¾ - .34
Diglycol stearate dms. ton lots lb. .26 - .28
Diglycolic acid bgs. c.l. t.l., works. lb. .15½- —
bgs. l.c.l., works lb. .16 - —
Dihexyl sebacate dms., c.l., works. lb. .66 - —
dms., l.c.l., works lb. .67 - —
tanks, works lb. .64 - —
Dihydrazine sulfate, dms. works lb. 1.10 - 1.25
Dihydrostreptomycin hydrochloride, bulk, gram .04 - .041
Dihydrostreptomycin sulfate, bulk, gram .04 - .041
1,2-Dihydroxy anthraquinone, dms., works lb 3.45 - —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb 2.55 - —
tech., dms., 20,000 lbs. or more lb. 1.11 - —
dms., 1,050 lbs. to 20,000 lbs. lb. 1.13 - —
dms., 150 lbs. to 1,050 lbs lb. 1.15 - —
Di-isobutyl ketone, dms. c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd lb. .18½- —
tanks, dlvd. lb. .14½- —
Di-isobutyl phthalate, dms., c.l., dlvd. E lb. .31½- —
dms., l.c.l. same basis lb. .32½- —
tanks same basis lb. .29 - —
Di-isobutylene dms. c.l. dlvd. E lb. .10 - —
dms., l.c.l., dlvd. E lb. .11½- —
tanks, dlvd. E lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., dlvd lb. .27½- —
dms., l.c.l. same basis lb. .29 - —
tanktrucks, 1,000-1,999 gals., dlvd. lb. .25½- —
tankcars, tanktrucks, 2,000 gals., dlvd. lb. .25 - —
Di-iso-octyl sebacate, dms., c.l., works lb. .62 - —
dms., l.c.l., works lb. .62½- .63
tanks, works lb. .60 - —
Di-isopropanolamine dms, c.l., dlvd. lb. .23¼- —
dms., l.c.l., same basis lb. .24¾- —
tanks, same basis lb. .20¾- —
Di-isopropylamine dms., c.l., dlvd. E of Rockies lb. .50½- —
dms., l.c.l., same basis lb. .52 - —
tanks, same basis lb 48 - —
Dillweed oil, dom., bots., dms lb. 3.00 - 4.00
Dimethyl anthranilate, cns lb. 4.15 - —
Dimethyl ethanolamines, anhyd., dms. c.l. dlvd lb 1.225 - —
dms., l.c.l., dlvd. lb. 1.235 - —
tanks, dlvd. lb. 1.20 - —
70% dms. c.l., dlvd., 100% basis, contained amines lb. 68½- —
dms., l.c.l., dlvd., 100% basis lb. .69½- —
tanks, dlvd., 100% basis lb. .66 - —
Dimethyl hydroquinone, dms. lb. 1.90 2.20
Dimethyl phthalate, dms., c.l., works lb. .27½- —
dms., l.c.l., works lb. .29 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .25½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .25 —
Dimethyl sebacate, dms., c.l., works. lb. 1.31 - —
dms., l.c.l., works lb. 1.30 - —
tanks, works lb. 1.28 - —
Dimethyl sulfate, ret. dms., c.l., works lb. .17½- —
ret. dms., l.c.l., works lb. .18½- —
tanks, works lb. .16½- —
Dimethyl sulfide, dms., c.l., works. lb. .16½- —
dms., l.c.l., works lb. .17 - —
tanks, works lb. .15 - —



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You don't expect her to know the technical reasons, but milady can certainly tell you which cleansing products are effective and how they have made her chores easier and simpler than ever before. Name virtually all the items she keeps beneath the kitchen sink, and you have practical applications for the broad modification properties of Jefferson SURFONIC® surface-active agents . . . low-foaming laundry detergents, liquid dishwashing detergents, high-foaming liquid detergents, general purpose cleaners, germicidal detergents, sanitizers, detergent bars, metal cleaners, and a host of other products.

Jefferson Chemical Company's surfactants are nonionic adducts of nonyl phenol (N-series 10 to 300) or tridecyl alcohol (TD-series 30 to 150) and ethylene oxide. The number is a tenfold multiple of the molar ratio of ethylene oxide to the hydrophobic portion of the adduct. SURFONIC® surface-active agents have excellent wetting, detergency, solubility, penetration, dispersion and compatibility properties and are stable over a wide range of conditions. Jefferson nonionic adducts may also be sulfated to produce anionic surface-active agents.

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JEFFERSON CHEMICALS

Dimethylamine—1-Epinephrine Base

Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis lb. .38 - —
dms., l.c.l., frt. equald, 100% basis lb. .38½- —
tanks, frt. equald, 100% basis lb. .28 - —
40% soln., dms., c.l., frt. equald, 100% basis lb. .35 - —
dms., l.c.l., frt. equald, 100% basis lb. .35½- —
tanks, frt. equald, 100% basis lb. .29 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .28 - —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .26 - —
N,N-Dimethylformamide, dms., c.l., t.l., works lb. .32½- —
dms., l.c.l., works lb. .33 - .34
tanks, works lb. .30 - —
2,4-Dinitroaniline, dms., frt. alld lb. 75 - —
Dinitroaniline orange toner, CP, bbls, dlvd E of Rockies lb. 1.56 - —
Dinitroaniline orange toner prices 1c higher W of Rockies
m-Dinitrobenzene, 89° C., dms. lb. .26 - —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld E lb. .17¼- —
dms., l.c.l., frt. alld E lb. .17¾- —
tanks, frt. alld, E lb. .17 - —
2,4-Dinitrophenol, bbls lb. .41 - —
2,4-Dinitrotoluene, oily, dms. lb. .11 - —
Refd., 63° C., dms lb. .23 - —
Dioctyl adipate, dms., c.l., works. lb. .42½- —
dms., l.c.l., works lb. .43½- —
tanks, works lb. .40 - —

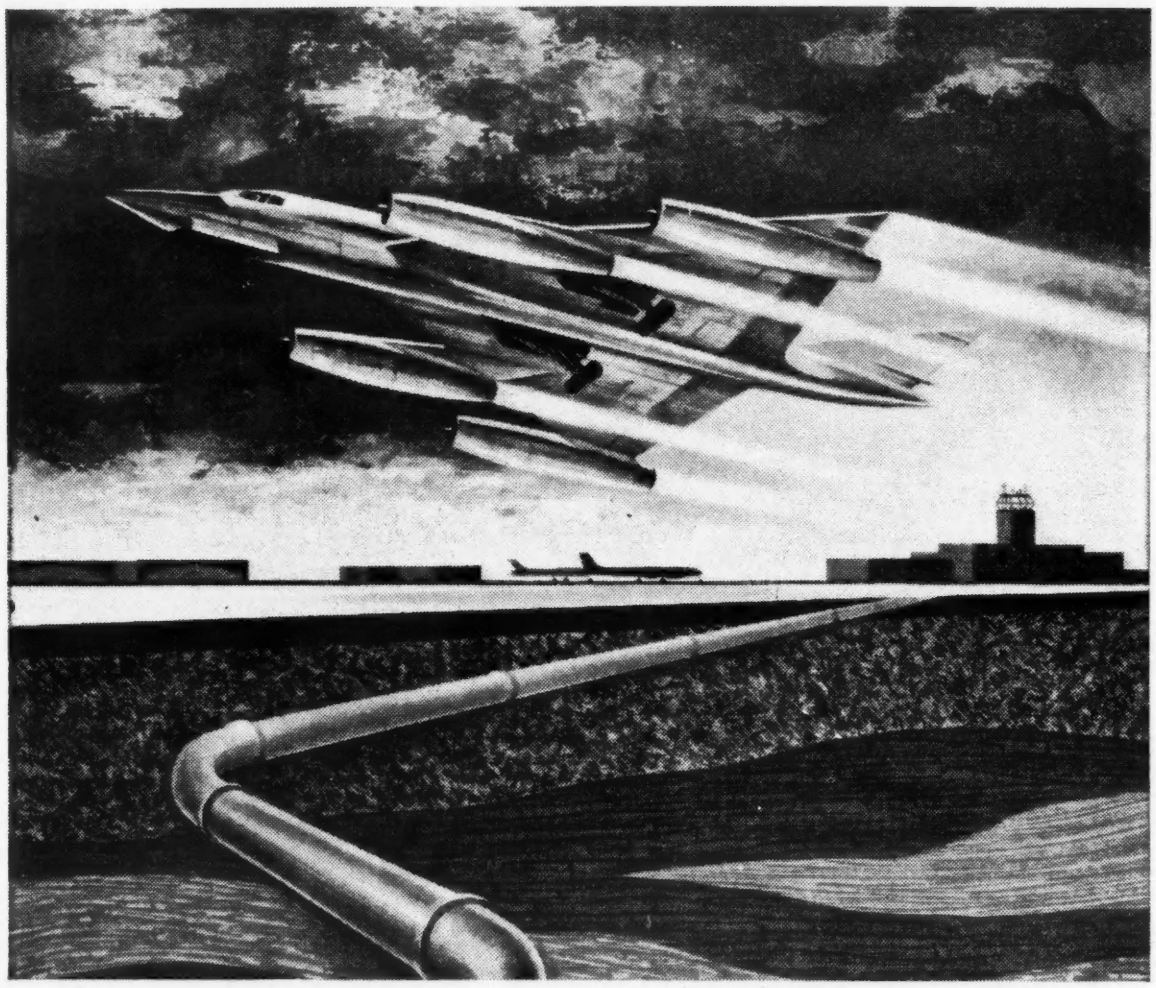
Dioctyl phthalate, dms., c.l., frt. alld lb. .27½- —
dms., l.c.l., frt. alld lb. .29 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .25½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .25 —
Dioctyl sebacate, dms., c.l., works. lb. .61¼- —
dms., l.c.l., works lb. .62¼- —
tanks, works, dlvd. lb. .59¼- —
1,4-Dioxane, dms., c.l., works lb. .30 - —
dms., l.c.l., works lb. .30¾- —
tanks, works lb. .28 - —
Dipentaerythritol, bgs., c.l., t.l., dlvd. E lb. .40 - —
bgs., l.c.l., l.t.l., dlvd. E lb. .41 - —
Dipentene, dest.-dist., dms., c.l., works gal. .59 - —
dms., l.c.l., works gal. .63 - —
dms., l.c.l., ex whse. gal. .79 - —
tankcars, works gal. .42 - —
Steam dist., dms., c.l., works, South gal. .72 - —
dms., l.c.l., dlvd. New York gal. .91 - —
tanks, works, South gal. .55 - —
Dip oil (see Fat acid oil)
Diphenolic acid, bgs., works lb. 1.50 - —
Diphenolic polyether acids, bgs., works lb. 1.50 - —
Diphenyl, bgs., c.l., t.l., works lb. .17¼- —
bgs., l.c.l., works lb. .19 - —
tanks, works lb. .16 - —
Diphenyl oxide, perfume grade, cns lb. .55 - .70
Diphenyl phthalate, dms., c.l., works. lb. .51¾- —
dms., l.c.l., works lb. .53¾- —

Diphenylamine, refd., flake, bgs., c.l., works, frt. equald lb. .31 - —
bgs., l.c.l., same basis lb. .33 - —
Refd., fused, tanks, same basis lb. .28 - —
same basis lb. .28 - —
Refd. diphenylamine in dms. ½c. per lb. higher.
Diphenylguanidine, bgs., dms., ton lots, frt. alld lb. .49 - —
bgs., smaller lots, frt. alld. lb. .50 - —
Diphenylhydantoin-sodium, USP dms. lb. 5.00 5.60
Dipropylene glycol, dms., c.l., frt. alld lb. .17¾- —
dms., l.c.l., frt. alld lb. .19¼- —
tanks, frt. alld. lb. .15¼- —
Dipropylene glycol methyl ether, dms., c.l., dlvd E lb. .20 - —
dms., l.c.l., same basis lb. .21½- —
tanks, same basis lb. .18½- —
Dithiodibenzoic acid, dms., 1,000-lb. lots, works lb. 1.45 - —
Di-o-tolylguanidine, dms., ton lots, frt. alld lb. .69 - —
dms., smaller lots, frt. alld. lb. .70 - —
Di-o-tolylthiourea, tech., solid, dms., c.l., t.l., frt. alld lb. .55 - —
Divinylbenzene, 20-25%, dms., c.l., works, frt. equald lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .19 - —
50-60%, dms., c.l., works, 100% basis lb. 1.00 - —
dms., l.c.l., works, 100% basis lb. 1.05 - —
Dodecylbenzene, dms., c.l., f.o.b., works, frt. equald lb. .134 - —
dms., l.c.l., same basis lb. .144 - —
tanks, same basis lb. .114 - —

Dodecylphenol, c.l., frt. alld. lb. .22 - —
dms., l.c.l., same basis lb. .23 - —
tanks, same basis lb. .19½- —
Dodecylphenol prices on shipments to Western States are 2c. per pound higher.
Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb and 1-lb. lots, dlvd:
Blue, FD&C, No. 1 lb. 15.65 -17.60
No. 2 lb. 15.65 -17.60
Green, FD&C, No. 1 lb. 15.65 -17.60
No. 2 lb. 19.60 -22.85
No. 3 lb. 31.30 -35.90
Red, FD&C, No. 1 lb. 5.90 - 7.85
No. 2 lb. 3.30 4.10
No. 3 lb. 19.60 -22.85
No. 4 lb. 5.55 7.50
Violet, FD&C, No. 1 lb. 15.65 -17.60
Yellow, FD&C, No. 1 lb. 9.15 -11.05
No. 5 lb. 3.30 4.10
No. 6 lb. 3.30 4.10
Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—
Black, D&C, No. 1 lb. 10.50 -10.95
Brown, D&C, No. 1 lb. 15.65 -16.10
Green, D&C, No. 5 lb. 15.65 -16.10
No. 6 lb. 15.65 -16.10
No. 7 lb. 14.35 -14.80
Orange, D&C, No. 3 lb. 10.50 -10.95
No. 4 lb. 19.60 -20.05
No. 5 lb. 3.80 4.25
Red, D&C, No. 17 lb. 10.50 -10.95
No. 18 lb. 23.60 -24.00
No. 19 lb. 15.00 -15.45
No. 21 lb. 3.90 4.35
No. 22 lb. 10.50 -10.95
No. 28 lb. 24.15 -24.65
No. 33 lb. 17.00 -17.45
Violet, D&C, No. 2 lb. 15.65 -16.10
Yellow, D&C, No. 7 lb. 10.50 -10.95
No. 8 lb. 10.50 -10.95
No. 10 lb. 13.05 -13.50
No. 11 lb. 13.05 -13.50
Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb and 1-lb lots dlvd:—
Blue, Ext., D&C, No. 1 lb. 15.65 -16.10
Green, Ext., D&C, No. 1 lb. 15.65 -16.10
Red, Ext., D&C, No. 1 lb. 13.05 -13.50
Yellow, Ext., D&C, No. 1 lb. 10.50 -10.95
Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract dlvd. No.
11110 Brilliant scarlet BN lb. 1.70 - —
13390 Fast blue SR lb. 1.30 - —
14025 Yellow 2G lb. 1.18 - —
14030 Orange R, extra, conc. lb. 1.52 - —
14645 Chrome black T lb. 73 - —
14720 Rubine XX, conc. lb. 1.47 - —
15510 Orange Y, extra conc. lb. 79 - —
15575 Orange RR lb. .94 - —
15620 Fast Red A, conc. lb. 1.53 - —
15705 Chrome blue black R, conc. lb. 1.07 - —
16150 Scarlet 2RL lb. 1.16 - —
16230 Fast light, orange 2G lb. 1.39 - —
16255 Brilliant scarlet 3RN, conc. lb. 1.20 - —
17590 Brown PG lb. 3.00 - —
18050 Phloxine 2G lb. 1.05 - —
18055 Fuchsine 6B lb. 1.55 - —
18965 Fast Yellow 2G lb. 2.32 - —
19140 Yellow XX lb. 2.30 - —
19555 Yellow NN, conc. lb. 3.67 - —
20170 Brown Y lb. 1.27 - —
20470 Blue black, extra, conc lb. 1.37 - —
21010 Brown, RX, conc lb. 1.35 - —
22240 Scarlet B lb. 2.60 - —
22310 Red FC lb. 1.45 - —
22311 Brown MCW lb. 1.40 - —
22590 Diazo black BHD lb. .93 - —
22610 Blue 2B, extra conc. lb. 1.53 - —
23500 Red, 4BX, conc lb. 1.80 - —
24410 Sky blue FF, extra, conc. lb. 1.95 - —
24895 Brilliant yellow conc lb. 3.11 - —
26400 Navy blue 3R, conc. lb. 1.70 - —
26695 Black F, conc. lb. 2.19 - —
26900 Milling Red 3R, conc. lb. 1.91 - —
27075 Neutral black 2B conc lb. 2.75 - —
27720 Gray L lb. 2.08 - —
29185 Fast scarlet 4BNC lb. 2.12 - —
30015 Diazo black VJ conc. lb. 2.48 - —
30235 Black EB, 200% lb. 1.33 - —
30045 Yellow brown K, extra lb. 1.26 - —
30295 Green BY, conc. lb. 1.02 - —
35660 Brown B lb. 2.89 - —
37565 Naphthol SWF lb. 1.76 - —
40000 Yellow 2G lb. 1.31 - —
41000 Yellow OX lb. 2.45 - —
42000 Green V, crystals lb. 2.73 - —
42040 Brilliant green G crystals lb. 3.62 - —
42090 Blue EG lb. 1.85 - —
42100 Milling green 6B conc. lb. 4.78 - —
42640 Violet 4BXN lb. 2.25 - —
43820 Brilliant blue BBG lb. 2.44 - —
44045 Blue B, extra conc. lb. 3.61 - —
45170 Red BX lb. 4.76 - —
50415 Nigrosine SSJ lb. 1.03 - —
52015 Blue GXX lb. 2.22 - —
53185 Black, GXCF, conc. lb. .38 - —
58005 Alizarin red SC lb. 3.31 - —
59700 Golden orange GFD single paste lb. 2.70 - —
59710 Flaming orange 6RD double powder lb. 4.90 - —
59800 Dark blue BO, single paste lb. 2.28 - —
59825 Jade green NC supra, double paste lb. 1.50 - —
61570 Alizarin green CG extra lb. 3.53 - —
63010 Alizarin blue SAPG lb. 3.78 - —
63615 Alizarin blue black B lb. 3.02 - —
69825 Blue BLFD double paste lb. 2.82 - —
70800 Brown BR single paste lb. 2.03 - —
Dyes, coaltar, oil-soluble, 100-lb drums dlvd. No.
12140 Oil scarlet BL lb. 1.70 - —
12055 Oil orange 7078 V lb. 5.87 - —
26120 Oil red N-1700 lb. 1.76 - —
42535B Methyl violet base lb. 1.88 - —
44045B Victoria blue base lb. 4.06 - —
50415B Oil black 8603 lb. .80 - —
61565 Alizarin cyanine green base, lb. 6.13 - —
Spirit black RB lb. 3.89 - —
Spirit brown GN lb. 5.30 - —
Spirit orange R conc. lb. 5.87 - —
Spirit red B conc lb. 6.41 - —
Spirit yellow 2R conc. lb. 4.62 - —
12055 Spirit, orange 7078 V lb. 1.25 - —
Spirit blue THN lb. 5.06 - —

E

Echinacea root, bls lb. 1.10 - —
Elm bark, grinding, bls. lb. .30 - .32
Powd., bbls., bxs lb. .50 - .55
Select, bundles lb. 75 - —
Emetine hydrochloride, USP bots oz. 48.40 - —
Endrin, tech., dms., t.l., dlvd lb. 3.35 - —
Eosin red toner, bbls., works lb. 1.85 - —
Ephedrine, syn., USP, anhyd., bots, 100-oz. lots oz. .98 - 1.00
hydrous bots 100-oz lots oz. .92 - —
Ephedrine hydrochloride, NF, dms., oz. .60 - .65
Ephedrine sulfate, USP cryst, dms., oz. .60 - .80
USP, powd., dms. oz. .60 - .80
Epichlorohydrin, dms., c.l., dlvd lb. .29½- —
dms., l.c.l., dlvd lb. .31 - —
tanks, dlvd. lb. .27 - —
Epsom salt (see Magnesium sulfate)
l-Epinephrine base, syn. USP bots. 100 gram lots gram. .58 - —



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Ever since its introduction a decade ago, Shell Epon 828 has set the pace as a uniform thermosetting plastic with a remarkably wide range of applications . . . from high-flying missiles to underground glass fiber pipe and pipe coatings. No other resin polymer combines such outstanding uniformity with *so many* other desirable properties.

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* * *

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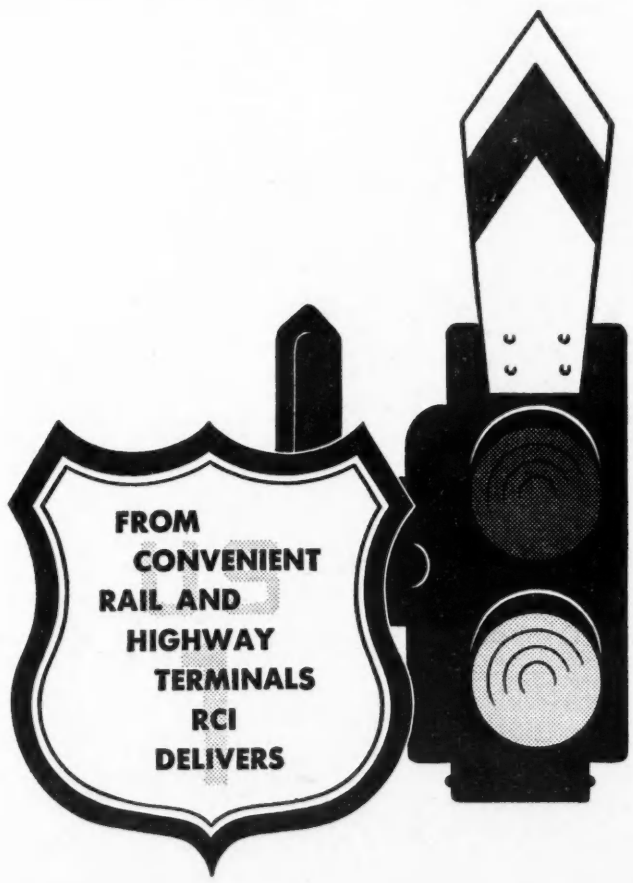
Western District, 10642 Downey Avenue, Downey, California

IN CANADA: Chemical Division, Shell Oil Company of Canada, Limited, Toronto

Erigeron oil, cns. ..... lb. 11.00 • —
Ergot, NF, dms., tin-lined ..... lb. 1.50 • —
Eserine salicylate, bots ..... oz. 54.75 • —
Eserine sulfate, bots ..... oz. 86.00 • —
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va. lb. .13 • —
Wood-rosin type, dms., c.l., same basis ..... lb. .13 • —
Ether (see specific product).
Ethyl acetate nat., ferment 85-88%, dms., c.l., dlvd lb. .13 • —
dms., t.c.l., dlvd ..... lb. .16½- —
tanks, dlvd. ..... lb. .12½- —
95-98%, dms., c.l., dlvd ..... lb. .15¼- —
dms., t.c.l., dlvd ..... lb. .16¾- —
tanks, dlvd. ..... lb. .12¾- —
99% dms., c.l., dlvd. ..... lb. .15½- —
dms., t.c.l., dlvd ..... lb. .17 • —
tanks dlvd ..... lb. .13 • —
Syn., 85-88%, dms., c.l., dlvd. lb. .15 • —
dms., t.c.l., dlvd ..... lb. .16½- —
tanks, dlvd ..... lb. .12½- —
95-98%, dms., c.l., dlvd ..... lb. .15¼- —
dms., t.c.l., dlvd ..... lb. .16¾- —
tanks, dlvd ..... lb. .12¾- —
99%, dms., c.l., dlvd. ..... lb. .15½- —
dms., t.c.l., dlvd. ..... lb. .17 • —
tanks, dlvd. ..... lb. .13 • —
Ethyl acetoacetate, dms., c.l., dlvd. lb. .58½- —
dms., t.c.l., dlvd. ..... lb. .60 • —
tanks, dlvd. ..... lb. .56 • —
Ethyl acrylate, dms., c.l., t.l., dlvd. lb. .36 • —
dms., t.t.l., dlvd. ..... lb. .37 • —
tanks, dlvd. ..... lb. .34 • —
Ethyl alcohol, 190 pf., USP, tax paid dms., c.l., dlvd. E. of Rockies gal. 20.63 • —
dms., t.c.l., same basis gal. 20.68 -20.74
Ethyl alcohol, 190 pf., USP, tax-free, dms., c.l., dlvd. E. of Rockies gal. .68 • —
dms., t.c.l., same basis gal. .73 • .79
tanks, same basis ..... gal. .52 • —
Ethyl alcohol, absolute 200 pf., tax paid, dms., dlvd. E. of Rockies gal. 21.75 • —
dms., t.c.l., same basis gal. 21.80 -21.86
tanks, same basis ..... gal. 21.59 • —
Ethyl alcohol, denatured (see Denatured alcohol, ethyl).
Ethyl aminobenzoate, USP (see Benzocaine).
Ethyl amyl ketone, dms., c.l., dlvd. lb. .20 • —
dms., t.c.l., same basis ..... lb. .21½- —
tanks, same basis ..... lb. .17½- —
Ethyl benzoate, bots ..... lb. .75 • 1.00
Ethyl bromide, tech., 98%, dms., c.l., frt. alld. E lb. .43 • —
dms., t.c.l., frt. alld. E .. lb. .45 • —
tanks, frt. alld. E. ..... lb. .41 • —
Ethyl butyl ketone, dms., c.l., t.l., works lb. .36 • —
dms., t.c.l., t.t.l., works ..... lb. .36¾- —
tanks, works ..... lb. .34 • —
Ethyl butyrate, dms., works .... lb. .85 • 1.00
Ethyl carbamate (see Urethane).
Ethyl cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, frt. alld. E lb. .73 • —
bgs., smaller lots, frt. alld. E. lb. .75 • —
Ethyl cellulose, vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E. lb. .68 • —
bgs., smaller lots, frt. alld E... lb. .70 • —
Ethyl chloride, tech., cyls., works. lb. .20 • .22
dms., works ..... lb. .18 • .20
tanks, works ..... lb. .10 • —
Ethyl cinnamate, cns. ..... lb. 3.35 • 3.50
Ethyl ethanolamines, mixed, dms., c.l., dlvd. E lb. .43½- —
dms., t.c.l., dlvd. E..... lb. .44½- —
tanks, dlvd. E. .. .. lb. .41½- —
Ethyl ether, absolute, ACS, dms lb. .27 • —
Anesthesia, USP, dealers, 1-lb. cns. lb. 1.01 • —
½-lb. cns. ..... lb. 1.09 • —
¼-lb. cns. ..... lb. 1.21 • —
Indust., dms., c.l., dlvd. ..... lb. .13½- —
dms., t.c.l., dlvd E ..... lb. .15 • —
tanks, dlvd. E. ..... lb. .11 • —
2-Ethyl hexoic acid, dms., c.l., t.l., dlvd. E lb. .37 • —
dms., t.c.l., t.t.l., dlvd. E. ..... lb. .38½- —
tanks, dlvd. E. ..... lb. 34½- —
2-Ethyl hexoic acid, 1c. higher W. of Rockies.
2-Ethylhexyl acrylate, c.l. or t.l., straight or mixed, frt. alld. E. lb. .42½- —
dms., t.t.l., same basis ..... lb. .43½- —
tanks, same basis ..... lb. .40 • —
Prices of 2-ethylhexyl acrylate are 1½c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
2-Ethylhexyl alcohol, dms c.l., dlvd. lb. .23¾- —
dms., t.c.l., dlvd. ..... lb. .25¼- —
tanks, dlvd. ..... lb. .21¼- —
Ethyl iodide, cbys., works ..... lb. 3.30 • —
Ethyl methacrylate, dms., c.l., frt. equald. lb. .52 • —
dms., t.t.l. frt. equald. ..... lb. .52½- —
tanks, frt. equald. ..... lb. .50 • —
Ethyl morphine hydrochloride, USP, bots. oz. 11.85 • —
Ethyl oenanthate, dms ..... lb. 1.05 • 1.30
Ethyl oxalate (see Diethyl oxalate).
Ethyl silicate, dist. (see Tetraethyl orthosilicate).
Ethyl silicate, 40% available, SiO_2, dms., c.l., dlvd. lb. .44½- —
dms., t.c.l., dlvd. ..... lb. .46 • —
tanks, dlvd. ..... lb. .42 • —
N-Ethyl-a-naphthylamine, dms., works. lb. 1.02 • —
N-Ethyl-m-toluidine, tech., liq., tanks, frt. alld. lb. .83 • —
N-Ethyl-o-toluidide, bbls. ..... lb. .88 • —
Ethylamine (see Mono-, Di-, or Tri-).
N-Ethylaniline, dms., c.l., frt. alld. lb. .57 • —
dms., t.c.l., frt. alld. ..... lb. .58 • —
tanks, frt. alld. ..... lb. .55 • —
Ethylbenzene 99% dms., c.l. or t.l., frt. equald. lb. .15 • —
dms., t.c.l., same basis ..... lb. .17 • —
tanks, same basis ..... lb. .12½- —
2-Ethylbutyl alcohol, dms., c.l., works. lb. .30 • —
dms., t.c.l., works ..... lb. .30¾- —
tanks, works ..... lb. .28 • —
Ethylene, contract, ref'y. gate .... lb. .0475- .0525
Ethylene dibromide, dms., c.l., frt. equald. lb. .30½- —
dms., t.c.l. frt. equald. ..... lb. .31½- —
tanks, frt. equald ..... lb. .28½- —
Ethylene dichloride, dms., c.l., dlvd. lb. .11½- —
dms., t.c.l., same basis ..... lb. .13 • —
tanks, same basis ..... lb. .09 • —
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.
Ethylene glycol, indust., dms., c.l., dlvd. E lb. .16 • —
dms., t.c.l., same basis ..... lb. .17½- —
tanks, same basis ..... lb. .13½- —
Ethylene glycol monobutyl ether, dms., c.l., dlvd. E lb. .22 • —
dms., t.c.l., dlvd. E. ..... lb. .23½- —
tanks, dlvd E. ..... lb. .19½- —
Ethylene glycol monoethyl ether, dms., c.l., dlvd. E lb. .21 • —
dms., t.c.l., dlvd. E. ..... lb. .22½- —
tanks, dlvd. E. ..... lb. .18½- —
Ethylene glycol monoethyl ether acetate, dms., c.l., dlvd. E lb. .19½- —
dms., t.c.l., dlvd. E. ..... lb. .20½- —
tanks, dlvd., E. ..... lb. .17 • —
Ethylene glycol monomethyl ether, dms., c.l., dlvd. E lb. .21 • —
dms., t.c.l., dlvd. E. ..... lb. .22½- —
tanks, dlvd., E. ..... lb. .18½- —
Ethylene glycol monomethyl ether acetate, dms., c.l., dlvd. E lb. .29 • —
dms., t.c.l., dlvd. E. ..... lb. .29¾- —
tanks, dlvd. E. ..... lb. .27 • —
Ethylene glycol monostearate, triple pressed, dms lb. .33 • .35
Ethylene oxide, dms. c.l., dlvd. E. lb. .21½- —
dms., t.c.l., dlvd. E. ..... lb. .24½- —
tanks, dlvd. E. ..... lb. .15½- —
Ethylene trichloride (see Trichloroethylene)
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis lb. .42 • —
dms., t.c.l., dlvd. E., 100% basis, lb. .43 • —
tanks, dlvd. E., 100% basis lb. .40 • —
Ethylvanillin, 100-lb. fib. dms., 500-lb. lots and over lb. 6.75 • —
Eucalyptol, USP, cns., dms ..... lb. .85 • 1.49
Eucalyptus oil, NF, rectified, 70-75%, dms. lb. .48 • .70
NF, rectified, 80-85%, dms .... lb. .53 • .80
Eugenol, tech., dms. ..... lb. 1.45 • —
USP, dms. ..... lb. 2.10 • 2.80
Euphorbia herb, bls ..... lb. .12 • .15

F

F salt, paste, tech., dms., works .. lb. 2.39 • —
Feldspar, 140-200 mesh, bulk, c.l., works ton. 19.50 • —
Feldspar in bags $3 per ton higher
Fennel oil, sweet, USP, cns. .... lb. 2.25 • 2.70
Fennel seed, Argentine, bgs. .. lb. .14 • —
French, light, bgs ..... lb. .20 • —
Indian, light, bgs ..... lb. .20 • —
Rumanian, bgs. ..... lb. .14 • —
Yugoslav, light, bgs ..... lb. .16½- —
Fenugreek seed, Moroccan, bgs lb. .07½- —
Ferric chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.50 • —
dms. t.c.l., works ..... 100 lbs. 8.50 • —
Indust., cryst., bbls., c.l., works, 100 lbs. 5.25 • 6.75
bbls., t.c.l., works ..... 100 lbs. 5.75 • 7.25
42° Be., photo grade, cbys., c.l., works .. 100 lbs. 7.25 • 8.25
sewage grade, tanks, frt. equald, 100% basis 100 lbs. 4.00 • —
USP, cryst., dms., t.l., works lb. .08½- —
Ferric citrate, gran., dms. ..... lb. .86 • —
Ferric hypophosphite, NF, dms lb. 3.45 • —
Ferric naphthenate, liq., 6% Fe, dms., frt. alld lb. .28¼- —
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works E. lb. .89 • —
Ferric oxides (see Iron oxides).
Ferric phosphate, NF, soluble gran. pearls, cs lb. .72 • .75
Ferric pyrophosphate, NF VII, soluble, gran., pearls, dms. lb. .79 • —
Ferric resinate, 6¾% Fe., dms., ton, lots, frt. alld lb. .38½- —
Ferric stearate, dms., c.l., frt. alld. lb. .39 • —
dms., t.c.l., frt. alld. ..... lb. .40 • .44
Ferric sulfate, partly hydrated, bgs., c.l. works ton. 35.25 • —
bgs., t.c.l., works ..... ton. 36.25 -42.25
bulk, c.l., works ..... ton. 33.25 • —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms lb. .63 • .68
Green, pearls, USP XII, gran., dms lb. .66 • .69
Ferric-ammonium oxalate, fine gran., dms lb. .27½- .29¼
Ferric-potassium oxalate, fine gran., dms lb. .32½- .34½
Ferric-sodium oxalate, fine gran., dms lb. .27½- .29¼
Ferrous gluconate, USP, 200-lb. dm., frt. equald lb. 96 • —
Ferrous sulfate, gran., bgs., c.l., works ton. 34.50 • —
bgs., t.c.l., dlvd. Metropolitan area, 100 lbs. 3.35 • 4.25
bbls., c.l., works ..... ton. 40.00 • —
bulk, c.l., works ..... ton. 27.00 • —
USP, cryst., bbls., dms. ..... lb 09½- 10
Fir balsam, Canada, bbls. ..... gal. 32.00 -35.00
Oregon, bbls. ..... gal. 3.40 • 4.64
Fir oil, Canada, cns ..... lb. 1.75 • 2.50



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Creative Chemistry . . . Your Partner in Progress

Synthetic Resins • Chemical Colors • Industrial Adhesives • Phenol • Hydrochloric Acid • Formaldehyde
Glycerine • Phthalic Anhydride • Maleic Anhydride • Sebacic Acid • Ortho-Phenylphenol • Sodium Sulfite
Pentaerythritol • Pentachlorophenol • Sodium Pentachlorophenol • Sulfuric Acid • Methanol
REICHHOLD CHEMICALS, INC., RCI BUILDING, WHITE PLAINS, N. Y.

Fish oil, refd., alkali, dms..... lb. .1300- .1350
Kettle-boiled, dms. ..... lb. .1530- .1580
Light-pressed, dms. ..... lb. .1150- .1200
tanks ..... lb. .10 - —
Fishliver oil, high potency, 100,000 A units per gram, dms. 1,000,000 units. 16 - —
200,000 A units per gram, dms. 1,000,000 units. 17½- —
500,000 A units per gram, dms.,
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic coast ton.112.00 -116.00
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic coast ton.108.00 -112.00
Fleaseed (see Psyllium seed)
Folic acid USP bots fib dms. kilo lots or more gram. .30 - .44
10% feed grade fib dms., 3 kilos or more kilo.30.00 -44.00
Formaldehyde, 37%, (inhibited 7 to 8% methanol) USP, dms, c.l., dlvd lb. .0670- —
tanks, dlvd. lb. .0405- —
37%, (inhibited 12 to 15% methanol), USP, dms., c.l., dlvd. lb. .0695- —
tanks, dlvd. lb. .0430- —
Formaldehyde, methanol-free (uninhibited) tanks, dlvd lb. .0375- —
Formic acid 85% chys. c.l., works. lb .1570- —
chys., l.c.l., works lb .1620- .1720
90%, chys., c.l., works..... lb. .1625- —
chys., l.c.l., works .....lb. .1675- .1775

Fringetree bark, bls.....lb. .65 - .70
Fuller's earth, bgs., c.l., ill. mines, ton.19.00 - —
Calcined, bgs., c.l., same basis. ton.20.00 -21.75
Insecticide grade, dried, powd., bgs., c.l., Ga. or Fla. mines. ton.17.50 - —
Oil-bleaching, grade, 100-mesh, bgs., c.l., same basis ton.16.30 -17.00
200-mesh, bgs., c.l., same basis. ton.17.50 -18.00
Spent, bgs., c.l., ship't point ton. 4.50 5.00
Fumaric acid, tech., 250-lb. dms., c.l., frt. alld..lb. .27¼- —
dms., l.c.l., same basis ..... lb. .28¼- —
Prices of fumaric acid 1½c. per lb higher west of Denver.
Furfural, dms., c.l., works ..... lb. .13 - —
dms., l.c.l., works ..... lb. .14 - —
tanks, dlvd W. ..... lb. .13 - —
tanks, dlvd E. ..... lb. .12 - —
Furfural alcohol, cns., works. lb. .29 - —
dms., l.c.l., Memphis, Tenn. lb. .21 - —
tanks, Memphis, Tenn. ..... lb. .184 - —
Furfuryl alcohol dms. c.l. Newark, N J lb. .21½- —
dms. l.c.l. Newark N J. ..... lb. .22½- —
Fusel oil, refd., dms., c.l., dlvd lb. .18 - —
dms., l.c.l., dlvd ..... lb. .19½- —
tanks, dlvd. ..... lb. .15½- —

G

G salt, bbls. frt. alld., 100% basis.lb. .73 - —
Gallic acid NF VII, bbls., 1,000-lb. lots lb 2.00 - —
bbls., smaller lots ..... lb 2.02 - 2.22
Tech., bbls., 1,000-lb. lots... lb. 1.78 - —
bbls., smaller lots ..... lb. 1.80 - 2.00
Gamma acid, dry grd., bbls., frt. Paste bbls., frt. alld ..... lb. 1.70 - —
Gammapicoline (see g-picoline).
Garlic oil, dom. bots. ..... oz. 4.75 - 6.05
Imp. bots ..... oz. 4.50 - 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin, edible, pure pork skin, 75 AOAC test, bbls. c.l. ... lb. .53 - —
150 AOAC test, bbls. c.l. ... lb. .62 - —
200 AOAC test bbls c.l. ... lb. .68 - —
225 AOAC test, bbls. c.l. ... lb. .70 - —
275 AOAC test, bbls. c.l. ... lb. .78 - —
Gelsemium root, bls.....lb. .30 - .35
Gentian root bls. .....lb. .24 - —
Grd., bbls., bxs .....lb. .30 - —
Powd., bbls., bxs.....lb. .30 - —
Geraniol extra, cns., dms.....lb. 2.00 - 3.65
Soap grade, dms.....lb. 1.05 - 1.30
Standard cns. dms. ..... lb 2.00 - 3.40
Geranium oil, Algerian, cns....lb.19.00 - —
Bourbon, cns. .....lb.18.00 - —
Geranium oil, Turkish (see Palmarosa oil).
Geranyl acetate, cns..... lb. 1.90 - 2.70
Ginger oil, dist., bots ..... lb.10.50 -14.00
Ginger oleoresin, NF from African root, bots..lb. 4.25 - 5.00
NF, from Jamaican root, bots. lb. 7.75 - —
Ginger root, Cochin, bgs.....lb. .16 - —
Jamaican, No. 3, bgs.....lb. .32 - —
Nigerian, split bgs.....lb. .13 - —
Sierra Leone, bgs .....lb. .19 - —

Glauber's salt (see Sodium sulfate).
Gluconic acid, tech., 50%, dms., c.l., t.l., frt. alld. lb. .18 - —
dms. l.c.l., frt. alld. ..... lb. .20¼- —
tanks, frt. alld. ..... lb. .13½- —
Glue, bone, extracted, dry bone, 86 jellygrams, bgs. c.l., dlvd. lb. .16 - —
131 jellygrams, bgs., c.l., same basis lb. .16½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
191 jellygrams, bgs., c.l., same basis lb. .19½- —
222 jellygrams, bgs., c.l., same basis lb. .21 - —
Glue, bone, green, 40 jellygrams, bgs., c.l., same basis lb. .16- —
86 jellygrams, bgs., c.l., same basis lb. .16 - —
115 jellygrams, bgs., c.l., same basis lb. .16¼- —
135 jellygrams, bgs., c.l., same basis lb. .17½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
180 jellygrams, bgs., c.l., same basis lb. .19½- —
200 jellygrams, bgs., c.l., same basis lb. .20½- —
Bone glue, l.c.l., prices 2c. higher.
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd. lb. .17 - —
95-121, bgs., c.l., dlvd. .... lb. .17 - —
122-149, bgs., c.l., dlvd. .... lb. .19½- —
150-177, bgs., c.l., dlvd. .... lb. .22 - —
178-206, bgs., c.l., dlvd. .... lb. .24½- —
207-236, bgs., c.l. dlvd. .... lb. .27 - —
237-266, bgs., c.l., dlvd. .... lb. .29 - —
267-298, bgs., c.l., dlvd. .... lb. .31 - —
299-330, bgs., c.l., dlvd. .... lb. .33 - —
331-362, bgs., c.l., dlvd .... lb. .35 - —
363-394, bgs., c.l., dlvd..... lb. .37 - —
395-427, bgs., c.l., dlvd..... lb. .39 - —
428-460, bgs., c.l., dlvd..... lb. .41 - —
461-494, bgs., c.l., dlvd .... lb. .42 - —
495-529, bgs., c.l., dlvd..... lb. .45 - —
Hide glue l.c.l. prices 2c higher
l-Glutamic acid, 99½%, fib. dms., 100-lb lots, frt alld lb. 1.80 - —
fib. dms., 25-lb. lots, frt. alld. lb. 1.88 - —
l-Glutamine, bots., 1-9 kilo lots, kilo.150.00 -300.00
50-kilo lots ..... kilo.100.00 - —
500-kilo lots ..... kilo.75.00 - —
Glycerine, dom., nat., crude, saponification, 88%, tanks, dlvd lb. .20½- .21
nat., crude, soapiye 80% tanks, dlvd lb. .18½- .19
Nat., refd., USP CP, 99%, dms., c.l., dlvd. lb. .30⅞- —
dms., l.c.l., dlvd ..... lb. .31⅝- —
tanks, dlvd. ..... lb. .29⅛- —
Nat., refd., USP, CP, 96%, dms., c.l., dlvd. lb. .30 - —
dms., l.c.l., dlvd..... lb. .30¾- —
tanks, dlvd. ..... lb. .28¼- —
Nat., high gravity, dms., c.l., dlvd. lb. .30¼- —
dms., l.c.l., dlvd..... lb. .31½- —
tanks, dlvd ..... lb. .29 - —
Syn., dms., c.l., dlvd. ..... lb. .31 - —
dms., l.c.l., dlvd. ..... lb. .31¾- —
tanks, dlvd. ..... lb. .29¼- —
Imp., nat., crude, soapiye, 80%, c.i.f. lb. .19 - .20½
Glycine (see Aminoacetic acid)
Glycerol (see Glycerine).
Glycolic acid (see Hydroxyacetic acid).
Glyoxal, 30%, dms., c.l., works lb. .20½- —
dms., l.c.l. works ..... lb. .21¼- —
tanks, works ..... lb. .18 - —
Golden seal root, NF, tested, bls. lb. 2.75 - 3.25
Gramicidin, 1 to 5 kilos, f.o.b. works, gram 4.70 - —
Grapefruit oil, dms..... lb. 1.95 - 2.50
Graphite, amorp, powd., bgs., fib. dms., ex whse lb. .06 - .09½
cryst., 88-90% powd., bgs., fib. dms ex whse lb. .19 - .21½
cryst., 90-92%, powd., bgs., fib. dms., ex whse lb. .21 - .24½
powd., bgs., fib. dms., ex whse. lb. .29 - .31½
Graphite, flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
No. 2, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
Grease, white, choice all hog, tanks, dlvd. lb. .06¼- .06⅜
Yellow, tanks, dlvd..... lb. .04¼- .04⅜
Grease oil, No. 1, dms., c.l. ... lb. .14¾ Nom.
dms., l.c.l. ..... lb. .15¾ Nom.
lb. .17¼ Nom.
Extra winter strained, dms., c.l. lb. .17¼ Nom.
dms., l.c.l. ..... lb. .18¼ Nom.
Prime, burning, dms., c.l..... lb. .18¾ Nom.
dms., l.c.l. ..... lb. .19¾ Nom.

GREEN PIGMENTS
Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

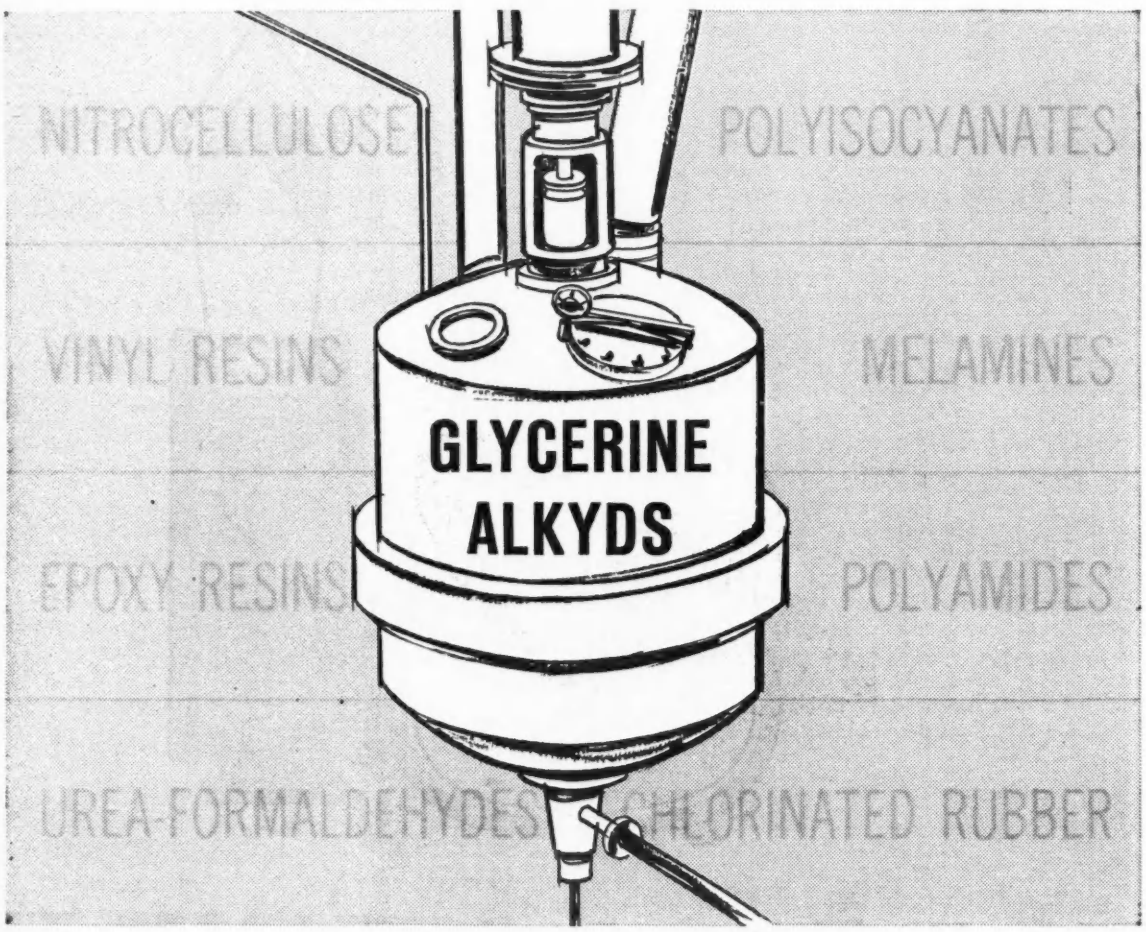
Grindelia robusta herb bls lb .45 —
Guaiacol, NF, cryst., dms., tins lb. 2.10 - 2.15
NF, liq., chys., dms ..... lb 2.30 - 2.40
Guaiacol carbonate, NF VII, dms.lb 3.40 - 3.45
Guaiacwood oil, cns ..... lb. .75 - 1.30
Guar gum, food grade bgs., c.l lb. .38 - —
bgs., 5,000 lbs. or more ..... lb. .39 - —
Indust., bgs., c.l. ..... lb. .32 - —
Tech. grade, bgs. ..... lb. .30 - .33

GUMS
Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

Gypsum, plaster of Paris, 100-lb. paper bgs., trucks, dlvd. New York ton.20.30 - —
Terra alba, dom., 100-lb paper bgs., trucks, same basis ton.20.00 - —
100-lb. paper bgs., trucks, works, New York ton.17.00 - —
Terra alba, imp., English, 100-lb. paper bgs., l.c.l., ex dock, New York ton.55.00 - —
100-lb paper bgs. ex whse. ton.60.00 -62.00

H

H acid, dry, bbls., c.l., frt. alld., 100% basis lb. .90 - —
bbls., l.c.l. same basis lb. .95 - —
Hansa yellow 10 G, bbls. dlvd. E. of Rockies lb 2.45 - —
Hansa G yellow, pigment bbls lb 2.20 - —
Hawthorn berries, bgs. ..... lb .18 - .20
Heliotropin, 100-lb. lots, dms .. lb. 2.60 - 3.40
Hellebore root dom., green, bls lb .70 - .75
Helonias root, bls ..... lb. 1.50 - —
Hemlock oil, cns ..... lb. 2.55 - 3.00
Henbane leaves, bls ..... lb. .30 - .35
Heptachlor, dms., c.l., t.l., 100% basis, frt. alld. lb. .96 - —



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Glycerine outperforms other polyols in merging alkyds with modifiers. It lessons tendency to gel during cooking. It permits more flexibility in the condensation process. And the resulting modified alkyds are more soluble, have better clarity and greater resistance to haze.

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Properties
HYGROSCOPICITY • STABILITY
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NONVOLATILITY • NONTOXICITY
TASTE • COMBINING WEIGHT

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Glycerine

Applications
HUMECTANT • CARRIER
SOLVENT • LUBRICANT
SOFTENER • EMOLLIENT
ANTI-FREEZE • ALKYD BASE

GLYCERINE PRODUCERS' ASSOCIATION • 295 MADISON AVENUE, NEW YORK 17, N. Y.

Heptane, industrial, tankcars, New Jersey and New York, gal. .20 - —
Houston, Texas ..... gal. .1625- —
Hesperidin, purif., 100-lb. fib. dms., f.o.b., works lb. 8.95 • —
Hesperidin methylchalcone, bots., 50-lb. lots, works lb. 22.50 • —
bots., 5-lb. lots, works ..... lb. 23.00 • —
bots., 1-lb. lots, works ..... lb. 23.50 • —
Hexachloropnene, dms., 1,100 lbs., or more lb. 1.84 • —
dms., to 1,100 lbs. ..... lb. 1.94 • —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech. bgs., 20,000-lb. lots or more, Perth Amboy or New York City .. lb. .233 - —
bgs., 1,000-19,999-lb. lots, same basis lb. .243 • —
bgs., smaller lots same basis lb. .253 • —
fib. dms., 1,000-lb. lots or more, same basis lb. .250 • —
fib. dms., smaller lots, same basis lb. .253 • —
USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York City and Philadelphia, lb., 42½- —
bgs., smaller lots, same basis .. lb. .43½- .48½
Hexane, industrial, tankcars, New Jersey and New York, gal. .20 • —
Houston, Texas ..... gal. .16 • —
1-Hexanol, dms., c.l., works ..... lb. .35 • —
dms., l.c.l., works ..... lb. .35¾- —
tanks, works ..... lb. .33 - —
Hexyl cinnamic aldehyde, dms lb. 4.00 - 7.50
n-Hexyl methacrylate, dms., c.l., works lb. .75½- —
dms, l.c.l., works ..... lb. .76 • —
Hexyl salicylate, dms. ..... lb. 1.75 • —
Hexylene glycol, dms., c.l., dlvd lb. .17½- —
dms., l.c.l., dlvd ..... lb. .19 • —
tanks, dlvd. ..... lb. .15 • —
Hexylresorcinol, USP dms., 25-lb. lots or more, dlvd lb. 14.00 • —
dms., smaller lots, dlvd. .. lb. 14.50 • —
Homatropine hydrobromide, USP, bots oz. 3.50 • —
Homatropine methylbromide, USP, bots oz. 3.25 • —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton 6.75 • —
Horehound herb, bls. ..... lb. .16 • .19
Hydrastis (see Goldenseal).
Hydrazine hydrate, 65% ret. dms., works lb. 1.35 - 1.55
100%, ret. dms., works ..... lb. 1.60 - 1.90
Hydriodic acid, 1.50 s.g., cbys. . lb. 2.92 • —
1.70 s.g. cbys. ..... lb. 3.23 • —
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd. zone 1 lb. .29¼- —
dms., l.c.l., dlvd. zone 1 lb. .29¾- .30½
tanks dlvd. zone 1 ..... lb. .27¼- —
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.
Hydrobromic acid, medicinal, 48%, cbys., frt. equald .. lb. .48 • .56
Hydrochloric acid, anhyd. (see Hydrogen chloride)
Hydrochloric acid, 18°, cbys., c.l., works 100 lbs. 2.50 • —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 2.90 - 3.03
tanks works frt. equald ton 28.00 • —
20°, cbys., c.l., works .. 100 lbs. 2.75 • —
cbys., l.c.l., dlvd. Metropolitan area 100-lbs. 3.15 • —
tanks works frt. equald ton 30.00 • —
22°, cbys., c.l., works .... 100 lbs. 3.25 • —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 3.65 • —
tanks works frt. equald ... ton 35.00 • —
CP, USP, consumers cbys., extra, c.l., works .. lb. .15¾ • —
cbys., l.c.l., same basis lb. .17¼- .17¾
Hydrochloric acid, 5-pint bots., extra cs. c.l., same basis .. lb. .20¾- —
Hydrocortisone acetate bulk, bots., kilo lots or more .. gram. 1.15 - 1.20
Hydrocortisone alcohol bulk, bots., kilo lots or more .. gram. 1.15 - 1.20
Hydrocyanic acid, dilute, NF, 2%, 5-lb. bots. .lb. .40 • —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)
Hydrofluoric acid, aqueous, 70%, 55-gal. dms., c.l., t.l., dlvd. 100 lbs. 19.25 • —
55-gal. dms., l.c.l., t.l., dlvd. 100 lbs. 20.75 • —
20-gal. dms., c.l., t.l., dlvd. 100 lbs. 21.00 • —
20-gal. dms., l.c.l., t.l., dlvd. 100 lbs. 22.50 • —
tanks, works, frt. equald, 100 lbs. 15.50 • —
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery.
Hydrofluosilicic acid, dms., works, 30% basis .. lb. .06 • —
Hydrofuramide, dms., fib. ctns., works lb. .30 • .40
50-lb. cyls., l.c.l., works ..... lb. .55 • .60
Hydrogen chloride, anhyd., 50-lb. cyls., l.c.l., works .. lb. .45 • —
Hydrogen cyanide, liq., 98%, tanks, works .. lb. .14 • —
Hydrogen fluoride, anhyd., cyls., dlvd. E. lb. .30½- .32½
cyls. dlvd. W. ..... lb. .39 • —
tanks, works ..... lb. .21 • —
Hydrogen peroxide 35%, dms., c.l., dlvd lb. .202 • —
dms., l.c.l., dlvd. ..... lb. .211 • —
tanks, dlvd. ..... lb. .1800- —
Hydroquinone, photo grade, dms. lb. 1.10 - 1.13
Tech., dms., c.l., dlvd. ..... lb. .82½- —
dms., l.c.l., dlvd. ..... lb. .84½- —
Hydroxyacetic acid, tech., 70%, dms., Philadelphia and Chicago .. lb. .11 • —
tanks, Belle, W. Va. ..... lb. .073 • —
Hydroxycitronellol, cns. ..... lb. 3.75 • —
Hydroxyethyl cellulose, low viscosity grades, fib. dms., 20,000-lb. lots or more, f.o.b. shipping point, lb. .96 • —
fib. dms., 2,000 to 19,999-lb. lots, same basis .. lb. .99 • —
fib. dms., 150 to 1,999-lb. lots, same basis .. lb. 1.02 • —
fib. dms., less than 150-lb. lots, same basis .. lb. 1.12 • —
Hydroxyethyl cellulose high viscosity grades, fib. dms., 20,000-lb. lots or more, f.o.b. shipping point .. lb. 1.01 • —
fib. dms., 2,000 to 19,999-lb. lots, same basis .. lb. 1.04 • —
fib., dms., 85 to 1,999-lb. lots, same basis .. lb. 1.07 • —
fib. dms., less than 85-lb. lots same basis .. lb. 1.17 • —
Hyoscine salts (see Scopolamine)
Hyoscyamine hydrobromide, bots. oz. 7.00 • —
Hyoscyamine sulfate, bots. ..... oz. 7.00 • —
Hypophosphorous acid, purif. 50% cbys., ton lots, f.o.b. works .. lb. .85 • —
NF, 50%, cbys., all quantities, same basis .. lb. .75 • —

I

Ichthammol, NF, dms. ..... lb. .75 - 1.05
Indigo (see Dyes coaltar, 1171 indigo, syn).
Indole, CP, bots. ..... lb. 14.75 - 18.25
Inositol, bots., dlvd. ..... lb. 5.00 • —
dms., dlvd. ..... lb. 4.50 - 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs. ..... lb. .95 • —
Resub., USP, dms., f.o.b. works lb. 2.00 - 2.02
Iodochlorohydroquinolin, USP, dms. lb. 3.60 • —
Iodoform, NF, dms., kgs. ..... lb. 4.90 - 5.00
a-Ionone, cns. ..... lb. 3.85 - 5.00
b-Ionone, cns. ..... lb. 3.85 - 5.85
Ipecac root, whole, bgs ..... lb 8.00 - 8.50
Powd., bbls., bxs. ..... lb. 9.50 -10.00
Irish moss, bleached, prime, bls lb. .22 - .25
Iron blue, alkali-resisting, bbls., c.l., dlvd. E lb. .57 • —
bbls. l.c.l. ton lots same basis. lb. .58 • —
bbls., smaller lots same basis. lb. .59 • —
Iron blue, dom., reg., bbls., c.l., dlvd E lb. .52 • —
bbls., l.c.l., ton lots, same basis lb. .53 • —
bbls., l.c.l., smaller lots, same basis .. lb. .54 • —
Iron blue, imp., British, reg., bbls., c.l., dlvd. E .. lb. .48 • —
bbls., l.c.l., ton lots, same basis lb. .49 • —
bbls., l.c.l., smaller lots, same basis .. lb. .50 • —
Iron blue dlvd. prices 1c. higher for Pacific Coast states:—Wash., Ore., Cal., N. M., Ariz., Mon., Wyo., Utah, Col. and Nev.
Iron compounds (see Ferric or Ferrous)
Iron oxide, black, pure, bgs., c.l., works lb. .14¾- —
bgs., l.c.l., works ..... lb. .15 • —
Iron oxide, brown, pure, bgs., c.l., works lb. .14¼- —
bgs., l.c.l., works ..... lb. .14½- —
Iron oxide, metallic, brown, bgs., works lb. .05¼- —
Iron oxide, Persian Gulf, red, bgs., c.l., works lb. .08¾- —
Iron oxide, red, dom., pure, bgs., Bethlehem Easton E. St. Louis, New York City .. lb. .14¼- —
Iron oxide, red, nat., 75-85% ferric oxide, bgs., c.l., works lb. .06¼- —
bgs., l.c.l., works ..... lb. .06½- —
Iron oxide, Spanish red, bbls., c.l., ex dock lb. .05¾ Nom.
bbls., l.c.l. ex dock ..... lb. .06 Nom.
bbls., l.c.l. ex whse New York. lb. .06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb. .06¼- —
Peruvian type, bgs. l.c.l lb. .023 - .024
Iron oxide, yellow, pure, light lemon shade bgs. c.l. works lb. .12¼- —
Other shades, same basis lb. .12 - —
Isoamyl alcohol, dms., c.l., works, frt. alld E lb. .27½- —
dms., l.c.l., same basis ..... lb. .29 - —
tanks, same basis ..... lb. .25 - —
Isoborneol, cns. ..... lb. 1.44 - 1.80
Isobornyl acetate, cns. ..... lb. .46 - .56
Isobornyl formate dms ..... lb. 1.20 - —
Isobornyl proprionate dms. ..... lb. 1.25 - 1.35
Isobutyl acetate, perfume grade, cns lb. .33 - —
Isobutyl acetate, solvent grade, dms., c.l., dlvd. E. of Rockies lb. .15¼- —
dms., l.c.l. same basis ..... lb. .16¾- —
tanks same basis ..... lb. .12¾- —
Isobutyl alcohol dms. c.l., dlvd. lb. .15½- —
dms., l.c.l., dlvd. ..... lb. .17 - —
tanks, dlvd. ..... lb. .13 - —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
dms. l.c.l. dlvd ..... lb. .28½- —
Tech., dms., c.l., dlvd ..... lb. .22 - —
dms., l.c.l., dlvd. ..... lb. .23 - —
tanks, dlvd. ..... lb. .19½- —
Isoeugenol, cns. ..... lb. 3.40 - 4.25
Isoniazid, powd., bulk, kilo or more kilo. 18.00 - —
Isonicotinic acid, 100-lb fib dms., works lb 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd E. lb. .23½- —
dms., l.c.l., dlvd E ..... lb. .25 - —
tanks, dlvd E. ..... lb. .21 - —
Isopentane, comt. grade, tanks, f.o.b. Tex. refy gal. .15½- —
Isophthalic acid, dms., c.l., works, frt. equald lb. .152 - —
dms., l.c.l., same basis ..... lb. .162 - —

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- LACTOSE EDIBLE
- CRUDE MILK SUGAR
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Isopropanol (see Isopropyl alcohol).
Isophorone, dms., c.l., works .... lb. .24¼- —
dms., l.c.l., works .... lb. .25¼- —
tanks, works .... lb. .22½- —
Isopropyl acetate, dms., c.l., dlvd. lb. .14 - —
dms, l.c.l., same basis .... lb. .15½- —
tanks, same basis .... lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .58 - —
dms., l.c.l., dlvd .... gal. .68 - —
tanks, dlvd. .... lb. .42 - —
Refd., 95%, c.l., dem., dlvd .... gal. .60 - —
dms., l.c.l., dlvd .... gal. .70 - —
tanks, dlvd .... gal. .44 - —
anhyd., c.l., dlvd. .... gal. .62 - —
dms., l.c.l., dlvd .... gal. .72 - —
tanks, dlvd. .... gal. .46 - —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., dlvd lb. .09¼- —
dms., l.c.l., dlvd .... lb. .11 - —
tanks, dlvd .... lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC), tech., dms., c.l., t.l., works lb. 1.00 - —
dms., l.c.l., works .... lb. 1.05 - 1.25
tanks, works. .... lb. .99 - —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works lb. .75 - —
450-lb fib dms., l.c.l., works .. lb. .80 - .90
Isoquinoline, dms., works .... lb. .65 - 1.25

Itaconic acid, refd., bgs., c.l., f.o.b. works lb. .53½- —
bgs., l.c.l., same basis .... lb. .54½- —
Tech., bgs., c.l., same basis .. lb. .38½- —
bgs., l.c.l., same basis .... lb. .39½- —

J

J acid, paste, bbls., works, 100% basis lb 2.70 - —
Powd., bbls., same basis .... lb. 2.75 - —
Jalap root, NF, bls. .... lb. .90 - —
NF, powd., bbls., bxs. .... lb. 1.15 - —
Japan wax, cs .... lb. .27 - .29
Juniper berries, bgs .... lb. .16 - .17
Juniper berry oil, bots. .... lb 2.90 - 3.75
Twice rectified bots. .... lb. 3.25 - —
Juniper tar oil, NF dms .... lb. .42 - .60
Juniper wood oil, tech., cns. .... lb. .38 - .55

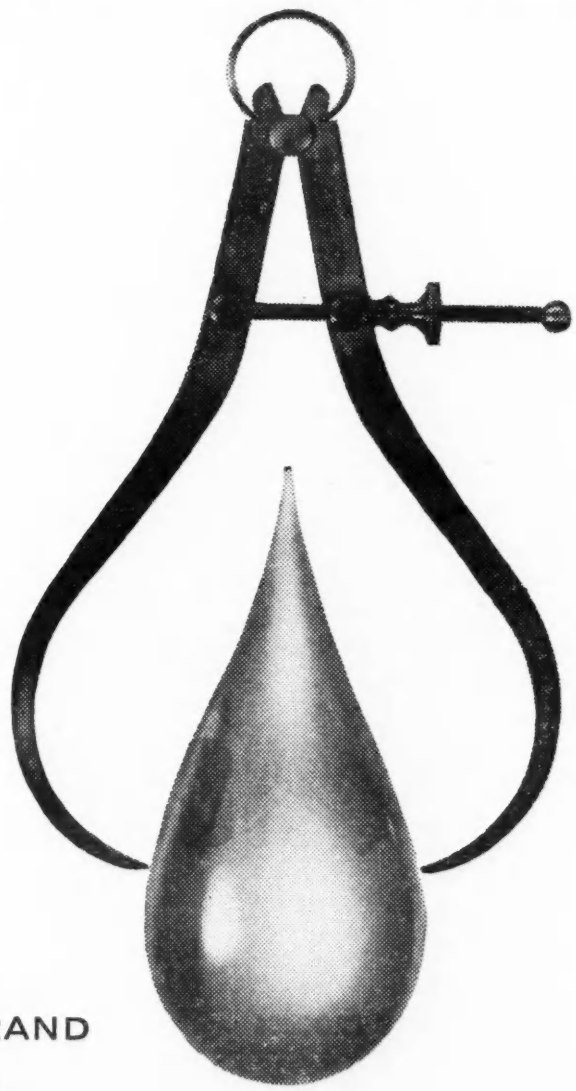
K

Kaolin (see also Clay, China).
Kaolin, NF, powd., fib. dms. .... lb. .10 - .12
NF, colloidal, 50-lb. bgs .... lb. .15½- .17½
Karaya gum No. 1, NF powd. bls lb. .45 - .48
No. 2, powd., bbls. .... lb. .40 - .42
No. 3, powd., bbls .... lb. .35 - .37
Koch acid, bbls., frt. alld., 100% basis lb. 1.00 - —
Kola nuts, bgs. .... lb. .10 - —

L

L acid, bbls., works .... lb. 1.25 - —
Lacquer diluent, petroleum, 140°F-200°F b.r., tankcars, New Jersey and New York gal. .20 - —
Group 3 .... gal. .15125- —
Houston, Texas .... gal. .16 - —
200°F-240°F b.r., tankcars, New Jersey or New York, gal. .20 - —
Group 3 .... gal. .14125- —
Houston, Texas .... gal. .16 - —
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald lb. .1985- —
bbls., dms., 20 or more, frt. equald lb. .2035- —
bbls. dms. 5 to 19 frt. equald. lb. .2085- —
bbls., dms., 1 to 4, frt. equald. lb. .2135- —
80%, bbls., c.l., dms., frt. equald. lb. .3335- —
bbls., dms., 20 or more, frt. equald lb. .3385- —
bbls dms 5 to 19 frt. equald. lb. .3435- —
bbls. dms., 1 to 4 frt. equald. lb. .3485- —
Plastic grade, 50%, c.l., bbls., works lb. .2740- —
bbls. 20 or more, works lb. .2790- —
bbls., 5 to 19, works .... lb. .2840- —
bbls., 1 to 4, works .... lb. .2890- —
80%, bbls., c.l., works .... lb. .4625- —
bbls. 5 to 19, works .... lb. 4725- —
bbls. 1 to 4, works lb 4775- —
Tech., 44% bbls. c.l. works 100 lbs.12.45 - —
bbls., l.c.l., works... 100 lbs.12.85 - —
USP, 85%, cbys. .... lb. .85 - —

Lactose, crystalline, edible, bgs., 23,000-lb. lots, frt. equald lb. .14 - —
bgs., 6,000-lb lots, frt equald lb. .14¼- —
bgs., 2,000-lb. lots, frt equald lb. .14¾- —
bgs., 200-lb lots, frt equald lb 15¼- —
Edible lactose in fib dms., ½c higher
Lactose, terment grade bgs., c.l., works lb 08½- —
USP, reg., fib. dms., 30,000-lb. lots, frt. equald lb. .21½- —
fib. dms., 2,000-lb lots, frt. equald lb .22¼ —
200-1,880-lb. lots, frt. equald lb. .22¾- —
USP lactose in bags ½c to 1c lower
Lactose, USP spray dried, bgs., t.l., frt. equald lb. .18½- —
bgs., t.t.l. frt equald lb .19 .19¾
Lady's slipper root, bls lb 3.50 3.75
Lake C red toner alizarine, bbls., works lb 1.25 - —
Lamp black, bgs. c.l., works lb .16 - .45
Lanolin cosmetic dms., works lb .27 .29
USP, anhyd. dms., works lb .24 .26
USP, hydrous, dms., works... lb. .23 - .25
Lard, cash, dms., Chicago .... lb. .07½- —
Lard oil (see Grease oil).
Larkspur seed, bgs .... lb. .55 - —
Laurel leaf oil, dms. cns. .... lb 9.75 -12.50
Laurent's acid, bbls .... lb. .70 —
Lauric acid, pure, dms .... lb. .38½- .41
tanks .... lb. .36 - .37
Lauryl alcohol, bots. .... lb 2.00 2.50
n-Lauryl methacrylate, dms., c.l., t.l works lb. 65½- —
dms., t.t.l., works lb .66 —
Lavandin oil, 22-24%, dms. .... lb 1.10 - 1.50
Abrial, dms. lb 1.00 1.50
Lavender flowers, medium, bls lb .55 .60
Ord., bls. .... lb 20 .25
Select., bls. .... lb 90 1.00
Lavender flower oil, USP, French 35-37% ester, cns lb. 1.85 - 4.00
40-42% ester cns lb 5.00 - 7.75
Spike, Spanish, cns lb 2.20 3.00
Lead acetate NF cryst., gran., powd., bbls. lb. .34½- —
White, cryst., bbls. .... lb. .25½- —
gran., bbls. .... lb. .26½- —
powd, bbls. .... lb. .26½- —
Lead arsenate acid powder dealers, 3-50 lb. bgs or any quantity, frt. alld. on $150 or more lb. .30½- —
1-lb bgs. same basis lb. .47 - —
Lead, blue, basic sulfate bbls. c.l., shipt point, frt alld. .. lb. .17 - —
bbls., l.c.l. same basis .... lb. .18 - —
Lead carbonate (see Lead, white, basic carbonate)
Lead chloride dms .... lb. .52 - —
Lead iodide NF V jars .... lb. 3.82 - —
Lead linoleate fused, 26% Pb dms. lb. .38 - —
Lead metal prime, pigs, New York. lb. .13 - —
St. Louis .... lb. .1200- —
Lead monosilicate, bgs., c.l., works, frt. equald lb. .143 - —
bgs. l.c.l., same basis lb. .153 - —
Lead naphthenate, liq., 16% Pb, dms., dlvd lb. .19½- —
24% Pb, dms., dlvd. .. lb. .24¼- —
Solid, 37% Pb. dms., dlvd. .. lb. .31¾- —
Lead nitrate, bbls. .... lb. .24¼- .26¾
Lead orthosilicate-gel, 50-60% PbO, dms., works lb. .29¾- .34¼
Lead peroxide, tech. powd. bbls lb. .45 - .50
Lead phthalate dibasic dms., works. lb. .41 - —
Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works, frt. equald lb. .15¼- —
bbls., l.c.l., same basis lb. .16¾- —
97% Pb_3O_4, bbls., c.l., same basis. lb. .1545- —
bbls., l.c.l., same basis ... lb. .1645- —
98% Pb_3O_4, bbls., c.l., same basis lb. .1560- —
bbls., l.c.l., same basis .. lb. .1660- —
Lead resinate precip. 23% Pb. dms., ton lots, dlvd lb. .40¼- —
Lead salicylate, normal dms. works, lb. .46 —
Lead silicate (see Lead white basic silicate).
Lead silico-chromate, bgs., c.l. f.o.b. mfrs. point, frt. alld. lb. .20 - —
bgs., l.c.l., same basis .... lb. .21 - —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate, liq., 16% Pb. dms lb. .15 - —
24% Pb, dms. .... lb. .21¼- —
Solid, 30% Pb. dms .... lb. .23¼- —
Lead, white, basic carbonate, bgs., c.l., shipt. pt. frt. alld lb. .18 - —
bgs., l.c.l., same basis .... lb. .19 - —
Lead, white, basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .16½- —
bgs., l.c.l., same basis .... lb. .17½- —
Lead, white basic sulfate bgs., c.l., shipt. pt., frt. alld. lb. .17 - —
bgs., l.c.l., same basis .... lb. .18 - —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works. lb. .14 - .15
non-ret. dms., l.c.l., same basis lb. .15 - .16
unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret. dms. l.c.l., same basis lb. .14 - .15
Lemon bioflavonoid complex, 100-lb. fib dms., works lb. 7.70 - —
Lemon oil, USP Calif., cns., dms. lb. 3.10 - 3.50
Messina, cns .... lb. 3.75 - 5.00
Lemongrass oil, cns., dms .... lb. 1.95 - —
dl-Leucine, dms., works .... lb 12.25 -15.00
Licorice root, gran., bls. .... lb. .13 - —
Powd., bls. .... lb. .15 - .16
Whole, bls .... lb. .09 - .10
Lignaloe wood oil, Mexican, cns lb 2.75 - 3.50
Lignosulfonate (see under ammonium or sodium lignin sulfonate)
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs., works, E. ton.14.25 - —
Chemical, hydrated, bgs., c.l., same basis ton.17.25 - —
Chemical, spray, bgs. c.l., same basis ton.18.25 - —
For New York delivery, add $6.29 freight charge.
Lime oil, dist., Mexican, cns .. lb. 5.90 - 6.75
West Indian, cns .... lb 6.50 7.80
Expressed, West Indian, cns lb 7.75 8.75
Lime salts (see Calcium).
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool, ex bois de rose oil, dms. lb 2.90 - 3.75
Syn., 98-100%, dms., works .. lb 3.20 3.60
Linalyl acetate, ex bois de rose, 90-92%, dms lb 3.05 - 3.75
96-98% dms. .... lb 3.60 —
Syn., 98-100%, dms., works lb 3.40 - —
Lindane, 25% formulation to distributors dms., frt alld lb 1.35 1.50
Lindane, tech. to formulators dms. 1-2,000 lbs., dlvd lb 2.40 —
Linden flowers, with leaves, bls lb 25 —
Without leaves, bls. .... lb 35 40
Linseed meal, expeller 32% bulk. Minneapolis, mills ton.78.50 Nom.
Extracted, 34% bulk, same basis ton.74.00 - —



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Exchange

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California Cold Pressed

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PRODUCTS SALES DEPARTMENT • ONTARIO, CALIFORNIA

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Fritzsche Brothers, Inc., 76 Ninth Ave., New York 11, N.Y.
Ungerer & Co., 161 Avenue of the Americas, New York 13, N.Y.

Linseed oil, raw, dms., c.l., New York	lb.	.1810-	—
dms., l.c.l., New York	lb.	.1900-	.1970
tanks, f.o.b., Minneapolis	lb.	.1450-	—
tanks, New York	lb.	.1561-	—
tankwagon, New York	lb.	.1611-	—
Boiled linseed oil, .006c. per lb. higher.			
Linseed oil acid, dist., dms.	lb.	.2050-	—
Water-white, dms.		.2350-	—
Litharge, coml., powd., bbls., c.l., works, frt. equald	lb.	.14¾-	—
bbls., l.c.l., same basis	lb.	.15¾-	—
Lithium aluminum hydride, lump, dms., works	lb.	33.00	-39.00
Lithium benzoate, dms.	lb.	1.65	- 1.67
Lithium bromide, NF, gran., works, frt. equald	lb.	2.60	- —
Lithium carbonate, NF, dms., c.l., t.l., dlvd	lb.	1.29½-	—
dms., ton lots to t.l., dlvd	lb.	1.30	- 1.30½
Tech., dms., c.l., t.l., frt alld	lb.	.67	- —
dms., ton lots, same basis	lb.	.73	- —
dms., smaller lots, same basis.	lb.	.79	- —
Lithium chloride, CP, anhyd., dms., ton lots	lb	1.23½-	—
Tech., anhyd., dms., c.l., t.l., dlvd, or works, frt. alld	lb.	.87	- —
dms., l.c.l., same basis	lb.	.88	- .92
Lithium citrate, NF, dms., ton lots.	lb	1.50	- —
Lithium fluoride, dms., 20,000-lb. lots, dlvd	lb	2.15	- —
bbls., ton lots and more, dlvd.	lb	2.18½-	—
bbls., less ton lots, dlvd.	lb.	2.23½-	—
Lithium hydride, powd., dms., 500-lb. lots or more, works	lb.	9.50	- —
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld	lb.	.72	- —
dms., l.c.l., frt. alld.	lb.	.73	- —
Lithium manganite, dms., works.	lb.	.95	- 1.05
Lithium nitrate, tech., dms., 100-lb. lots	lb.	1.15	- 1.25
Lithium salicylate, dms.	lb.	1.60	- 1.70
Lithium silicate, dms., works	lb.	1.10	- 1.20
Lithium stearate, dms., c.l., works.	lb.	.47½-	—
dms., ton lots, works	lb.	.48½-	—
dms., less-ton lots, works	lb.	.53½-	—
Lithium sulfate, dms., 100-lb. lots.	lb.	1.15	- 1.25
Lithium titanate, dms., works	lb.	1.15	- 1.25
Lithol red toner, barium, bbls., works	lb.	.98	- —
Lithol-rubine red toner, pure bbls., works	lb.	1.50	- —
Resinated, bbls., works	lb.	1.47	- —
Lithopone, ord., bgs., c.l., dlvd. E.	lb.	.08¾-	—
bgs., l.c.l., dlvd. E	lb.	.09½-	—
Titanated (high-strength), bgs., c.l., dlvd.	lb.	.11	- —
bgs., l.c.l. dlvd.	lb.	.12	- —
Lobelia herb bls.	lb.	.55	- —
Lobeline sulfate, bots., 50-oz. lots, works	oz.	30.00	- —
Locust bean gum, powd., bgs.	lb.	.38	- .40
Lycopodium, cs.	lb.	3.25	- 3.50
l-Lysine monohydrochloride, 25-lb. dms.	lb.	4.95	- —

M

Mace, Siauw, No. 1, bls.	lb.	2.20	- —
No. 2, whole, bls.	lb.	1.65	- —
siftings, bls.	lb.	1.60	- —
Mace oil, dist., cns., dms.	lb.	9.75	-12.25
Magnesia, calcined, tech., bgs., cns., frt. equald	lb.	.25¾-	.26½
Tech., syn., rubber grade, light, bgs., c.l., frt. equald	lb.	.28¾-	.30
rubber grade, extra light, bgs., c.l., frt. equald	lb.	.28	- —
bgs., l.c.l., frt. equald	lb.	.28¾-	—
Above prices are quoted f.o.b. works, freight equald, with Metropolitan New York and competitive producing points.			
Magnesia, calcined, tech., heavy, 85%, bgs., c.l., f.o.b. Luning, Nev.	ton.	39.50	- —
91%, bgs., c.l., same basis.	ton.	49.50	- —
95%, bgs., c.l., same basis.	ton.	59.00	- —
USP, light, bgs.	lb.	.36½-	.37½
USP, heavy, bgs.	lb.	.36½-	.37½
Magnesite, chemical grade, calcined, powd., bgs. c.l., works, frt. equald	ton.	86.25	- —
Chemical grade, deadburnt, standard grain, bulk, c.l., Chewelah, Wash.	ton.	46.00	- —
Magnesium bromide, cs., jars	lb.	.95	- 1.00
Magnesium carbonate, tech., bgs., c.l., frt. equald	lb.	.11	- —
bgs., t.l., frt. equald	lb.	.11½-	—
bgs., l.c.l., frt. equald	lb.	.13½-	.14
USP, bgs., c.l., frt. equald	lb.	.13½-	—
bgs., t.l., frt. equald	lb.	.14	- —
bgs., l.c.l., frt equald	lb.	.15	- .16
Above prices are quoted f.o.b. works, freight equald, with Metropolitan New York and competitive producing points.			
Magnesium chloride, anhyd., 92%, flake or pebble, dms., c.l., works	lb.	.12¾-	—
dms. l.c.l., works	lb.	.14	- .15
Hydrous, 99%, flake, bgs., c.l., works	ton.	55.00	- —
bgs., l.c.l., works	ton.	65.00	-80.00
Magnesium gluconate, 100-lb. dm., f.o.b works E	lb.	1.42	- —
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b., works	lb.	.24½-	.25½
Magnesium lauryl sulfate, dms., c.l., frt. alld	lb.	.22½-	—
dms., l.t.l., frt. alld	lb.	.23½-	—
tanks, frt. alld	lb.	.21½-	—
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works	lb.	.36	- —
pigs, 10,000-lb. lots or more, works	lb.	.35¼-	—
sticks, cs. works frt. alld. on carlots	lb.	.59	- —
Magnesium nitrate, cryst., dms., works	lb.	.29	- —
Magnesium oxide (see Magnesia, calcined).			
Magnesium phosphate tribasic, NF, bbls	lb.	.75	- —
Magnesium silicate (see Talc).			
Magnesium silicofluoride, dms., works	lb.	.10½-	.12
Magnesium sulfate, tech., bgs., c.l., works 100 lbs.		2.15	- —
bgs., l.c.l., works. 100 lbs.		2.90	- 3.15
USP, cryst., bgs., c.l., works, 100 lbs.		2.35	- —
bgs, l.c.l., 5,000 lbs., 1 withdrawal 100 lbs.		3.10	- —
bgs, smaller lots 100 lbs.		3.35	- —
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots	lb.	.38	- —
fib dms., 1,000-lb lots	lb.	.40	- —
fib. dms., 100-lb. lots	lb.	.45	- —
Bulky and super grades of magnesium trisicilate 7c. per. lb. higher.			

Malachite green, straight, PTMA, bbls, works	lb.	5.30	- —
Malathion, dms., c.l., works	lb.	.89	- —
dms., l.c.l., works	lb.	.92	- 1.01
Maleic acid, cryst., powd., dms.	lb.	.37¼-	—
Maleic anhydride, dms., c.l., dlvd. E. of Rockies	lb.	.28¾-	—
dms., l.c.l., dlvd. E. of Rockies	lb.	.29¾-	—
tanks, dlvd. E. of Rockies	lb.	.27¾-	—
Prices on maleic anhydride W. of Rockies, 1½c. per. lb. higher.			
Malic acid, tech., dms.	lb.	.50	- —
Mandelic acid, NF, dms., 1,000-lb. lots	lb.	2.35	- —
dms., smaller lots	lb.	2.40	- 2.50
Mandrake root, bls.	lb.	.40	- —
Manganese acetate, dms., dlvd.	lb.	.35	- —
Manganese borate, tecn., fib. dms.	lb.	.23½-	—
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb. lots and more, works	lb.	.11	- .16
Manganese chloride, CP, anhyd., dms., 20,000-lb. lots, works	lb.	.21¾-	—
smaller lots, works	lb.	.23½-	—
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works	ton.	148.00	- —
40,000 to 99,999-lb. lots, paper bgs., same basis	ton.	144.50	- —
40,000 to 99,999-lb. lots, dms. same basis	ton.	152.50	- —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $3 per ton higher.			
Manganese gluconate, dms.	lb.	1.84	- —
Manganese hydrate, dms., dlvd.	lb.	.35	- —

Manganese hypophosphite, NF, dms.	lb.	3.52	- —
Manganese linoleate, liq., 4.35% Mn, dms.	lb.	.35¾-	—
Solid, precip., 8.2% Mn, bbls.	lb.	.41¼-	—
Manganese metal, electrolytic, dms., c.l., dlvd. E.	lb.	.34	- —
dms., ton lots, dlvd. E.	lb.	.36	- —
dms., smaller lots, dlvd. E.	lb.	.38	- —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld.	lb.	.29¾-	—
Manganese resinate, fused, 3½% Mn, dms	lb.	.25¼-	—
Precip., 6½ 7% Mn, dms.	lb.	.33	- —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd S. E.	ton.	97.50	- —
bgs., l.c.l., dlvd. S. E.	ton.	104.50	- —
Manganese tallate, 6%, dms.	lb.	.26	- —
Manila copal gum, C, bgs.	lb.	.35	- .39
DBB, bgs.	lb.	.25	- .28
DK, bgs.	lb.	No stocks.	
DK, dust bgs.	lb.	.14	Nom.
MA, soft, bgs.	lb.	.20	- .24
WS, bgs.	lb.	No stocks.	
Mannitol, com'l, fib. dms., ton lots, works	lb.	.60	- —
fib dms. to ton lots, works	lb.	.62	- —
fib. dms., single dm., works	lb.	.65	- —
Marine pitch, dms.	lb.	.04¼-	.05
MBTS (see Mercaptobenzothiazyl disulfide)			
MBT (see 2-Mercaptobenzothiazole).			
Melamine, bgs., c.l., works	lb.	.27½-	—
bgs., l.c.l., works	lb.	.29	- —

Menadione, USP, bots.	gram.	.044	.05
Menhaden oil, crude, tanks, works, Atl. & Gulf	lb.	.07¼-	—
Menthol, nat., USP, Brazilian, cs.	lb.	6.30	- 6.75
Japanese, cs.	lb.	7.50	- 8.00
Syn., USP, racemic, cns.	lb	4.50	—
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld	lb.	.44	- —
bgs., fib. dms. less ton lots, same basis	lb.	.46	- —
Mercaptobenzothiazyl disulfide bgs., fib. dms., ton lots, works, frt. alld	lb.	.54	- —
bgs. fib dms. less ton lots, same basis	lb.	.56	- —
Mercuric chloride, NF cryst. dms., 50-lb lots or more	lb	4.98	- —
USP, gran. or powd., 50-lb. dm., 100 lbs., f.o.b. works	lb.	4.78	- —
Mercuric cyanide, NF VIII, powd., fib dms	lb	6.84	- —
Mercuric iodide red, NF, 100-lb. dm., f.o.b works	lb.	7.72	- —
Mercuric oxide, red., NF IX, 50-lb. dm., 100 lbs., f.o.b works	lb.	5.97	- —
tech., 50-lb. dm., 100 lbs., same basis	lb	5.77	- —
Mercuric oxide, yellow, NF, 50-lb. dm., 100 lbs., same basis.	lb.	6.14	- —
tech., bbls. 1,000 lb lots	lb	5.53	- —
bbls. smaller lots	lb	5.60	- —
Mercurous chloride (see Calomel).			

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ONE PRICE — *That Saves You Money*

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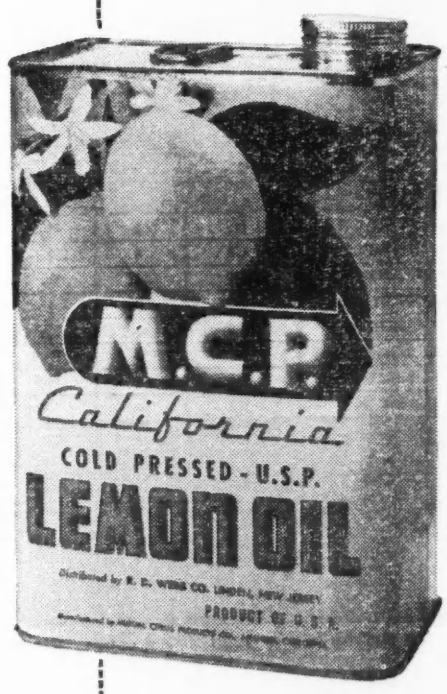

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For nearly 30 years, Mutual Citrus Products Co. has been cold-pressing California lemon oil for distribution by others. Now, M.C.P. LEMON OIL is being *prepared and packed* under the M.C.P. label. There is only *one label* and *one* quality — *the highest* — for M.C.P. LEMON OIL. Yet, M.C.P. LEMON OIL costs you *less* . . . while providing a product that is unsurpassed for flavor, purity, and dependability . . . for *every* purpose.

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Since 1928 Growers and Processors of Citrus Products

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424 South Atchison Street, Anaheim, Calif.

R. D. WEBB & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

Mercurous Iodide—Mineral Oil

Mercurous Iodide, yellow, NF, 100-lb. net-flask 224.00 -227.00
Mercury, ammoniated (see White precipitate, USP XV).
Mercury metal, 76 lbs. per flask, net-flask 215.00 -217.00
Mesityl oxide, dms., c.l., dlvd. lb. .15 - —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd. lb .12½- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works lb. .57 - .75
Metanitroparatoluidine (see m Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m Phenylenediamine)
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-tolylenediamine).
Methacrylic acid, glacial, 98%, dms., truckloads, frt. equald lb. .42½- —
dms., smaller lots, frt. equald. lb. .43 - .75
tanks, works, frt. equald lb. .40 - —
Methanol, nat., denaturing grade, tanks, frt. alld gal. .85 - —
Syn., zone 1, dms., c.l. or t.l. min., dlvd gal. .51½- —
dms., l.c.l., dlvd gal. .61½- —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35 - —
tankwagon, 4,000 gal. min., dlvd gal. .30 - —
tankwagon, 4,000 gal. min., f.o.b. terminal gal. .29 - —
Methanol, syn., zone 2, dms., c.l. or t.l., min., frt. alld. or dlvd gal. .55½- —
dms., l.c.l., works gal. .65½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd., Metropolitan area gal. .39 - —
tanks, 4,000 gal. min. dlvd. gal. .34 - —

Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

Methapyrilene fumarate, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 21.75 - —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 27.25 - —
Methenamine (see Hexamethylenetetramine).
Methionine hydroxyanalogue, (calcium salt) 90% min., dms., t.l., frt. alld. lb. 1.10 - —
dms., l.t.l., same basis lb. 1.16 - —
dl-Methionine, fib. dms., frt. alld., 50-lb. or more lb. 3.50 - —
Feed grade, 98%, fib. dms., same basis lb. 1.55 - —
Methyoxychlor, 50% wettable powder, dealers, dms., cs. lb. .66 - —

Methyl abietate, non-ret. dms., c.l., dlvd. zone 1 lb. .21¼- —
non-ret. dms., t.c.l., same basis lb. .22 - .22½
Methyl abietate, hydrogenated, non-ret. dms., c.l., dlvd. zone 1 lb. .23½- —
non-ret. dms., t.c.l., same basis, lb. .24 - .24½

Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio., Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Penn.

Methyl acetone, nat., dms., t.c.l., E. of Miss., frt. alld. gal. .62½- —
Syn., dms., c.l., frt. alld E. gal. .66 - —
dms., t.c.l., frt. alld. E. gal. .76 - —
tanks, frt. alld. E. gal. .51 - —

Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.

Methyl acrylate, dms., c.l., t.l., dlvd. lb. .39 - —
dms., t.t.l., dlvd. lb. .40 - —
tanks, dlvd. lb. .37 - —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E. lb. .17 - —
dms., t.c.l., dlvd. E. lb. .18½- —
tanks, dlvd E. lb. .14½- —
Methylamyl alcohol, dms., c.l., dlvd. lb. .17 - —
dms., t.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Methylamyl ketone, dms., works lb. 1.05 - —
N-Methylaniline tech., tanks, frt. alld. lb. .60 - —
Methylanthranilate, cns. lb. 2.20 - 2.75
Methyl benzoate cns., dms. lb. .60 - .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld. lb. .62 - .68

Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works lb. .82 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .89 - —
50-lb. bgs., smaller lots, frt. alld. or 100 lbs lb. 1.05 - —
Standard vis. (15,400 cps.) 50-lb. bgs., c.l., frt. alld. lb. .69 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .76 - —
50-lb. bgs., smaller lots, frt. alld. on 100-lbs lb. .79 - .89
Methyl chloride, indust., cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis, lb. .16¼- —
tanks, single unit, same basis, lb. .12¾- —
Methyl chloride, refrigerator mfrs., cyls., dlvd. lb. .48¾- —
other consumers or service men, cyls., dlvd lb. .67¾- —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns. lb. 1.55 - 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb. .15 - —
dms., t.c.l., dlvd lb. .16½- —
tanks, dlvd. lb. .12½- —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 - —
dms., t.c.l., works lb. .45¾- —
tanks, works lb. .43 - —
Methyl formate, refd., dms. lb. .35 - .40
Tech., non-ret. dms., any quantity, works lb. .10 - —
tanks, works lb. .07 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .21 - —
100-lb. multiwall paper bgs., t.l., min. 23,000 lbs., works lb. .21¼- —
100-lb. multiwall paper bgs., l.t.l., works lb. .23 - —
Methyl heptin carbonate, bots lb. 28.00 -31.00
Methyl p-hydroxybenzoate, fib. dms. lb. 1.90 - 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 - 3.85
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., dlvd lb. .17 - —
dms., t.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt. equald, with Belle, W Va. lb. .31 - —
dms., smaller lots, same basis lb. .31½- —
tanks, same basis lb. .29 - —
Methyl naphthyl ketone, cryst., cns lb 2.45 - 4.30
Methyl parahydroxybenzoate (see Methyl p-Hydroxybenzoate).
Methyl parathion tech., 80% dms., frt. alld. E lb. .84 - —
Methyl parathion prices 2c. per lb. higher in West.
Methyl roseaniline chloride, NF., 5-lb. fib. dms. lb. 6.90 - —
Methyl salicylate, dms. t.l., frt. alld lb. .60¼- —
dms., t.c.l., same basis lb. .62½- .67¼
Methyl testosterone USP, 100-gram bots gram. No Prices.
Methyl violet toner, molybdated, PMA, bbls., dlvd. E. of Rockies lb 2.80 - —
Tungstated, PTMA, bbls., same basis lb. 4.35 - —
Methyl violet prices 1c. higher W. of Rockies.
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb 3.25 - —
Methylene chloride, tech., straight or assorted, dms., c.l., or t.l., dlvd lb. .13½- —
dms., t.c.l., t.t.l. dlvd lb. .15¾- —
Tech., tanks, 4,000-gal. min., dlvd. lb. .12¼- —
tanktrucks, 1,000-gal. min., dlvd. lb. .13¼- —
b-Methylnaphthalene, 32°C., m.p., dms., works lb. .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs. c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —
Mica, wet-grd., biotite, bgs., c.l., works, frt. alld. E lb. .06½- —
bgs. t.c.l. ex-whse. lb. .07¼- —
paint or lacq., bgs., c.l., 325 mesh, works frt. alld E. lb. .08¼- —
bgs., t.c.l., ex-whse. or freight alld E lb. .09 - —
rubber bgs., c.l., works, frt. alld. E lb. .08 - —
bgs., t.c.l., ex-whse or frt. alld E lb. .08¾- —
wallpaper bgs. c.l. works, frt. alld E lb. .08¾- —
bgs., ex-whse. or frt. alld. E lb. .09 - —
white, 5-10 microns, bgs., c.l., works, frt. alld. E lb. .08¼- —
Mica, wet-grd. W. of Miss. ½c higher; W. of Rockies 1c. higher.
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11
laminating grades, tankcars, works lb. .11 - .12
Mineral black, bgs., works lb. .0160- .0673
Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. refy gal. .62 - —
non-ret. dms., t.c.l., same basis gal. .67 - —
tankcars, refy gal. 46 - —
65-75 vis., non-ret. dms., c.l., same basis gal. .62 - —
tankcars, refy gal. 46 - —
80-90 vis., non-ret. dms., c.l., same basis gal. .63 - —
non-ret. dms., t.c.l., same basis gal. .68 - —
tankcars, refy gal. 47 - —
135-138 vis., non-ret. dms. c.l., same basis gal. .69 - —
non-ret. dms., t.c.l., same basis gal. .74 - —
tankcars, refy gal. .53 - —
145-155 vis., non-ret. dms. c.l., same basis gal. 75 - —
non-ret. dms., t.c.l., same basis gal. .80 - —
tankcars, refy gal. .59 - —
USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .77 - —
non-ret. dms., t.c.l., same basis gal. .82 - —
tankcars, refy gal. .61 - —
USP, 200-210 vis., non-ret. dms., c.l., f.o.b. New York gal. .34 - —
non-ret. dms., t.c.l., same basis gal. .89 - —
tankcars, refy gal 63 - —
300-350 vis., non-ret. dms., c.l., f.o.b. New York gal. .84½- —
non-ret. dms., t.c.l., same basis gal .89½ - —
tankcars, refy. gal. .68½- —

USE THIS CHECK-CHART...

PRODUCT	Melting Point Minimum °F	Penetration at 77°F Maximum	Color N.P.A. Maximum	Acid Number	Saponification Number
EMULSIFIABLE GRADES for POLISHES					
PETROLITE C-15	180	6	5	15/17	45/55
PETROLITE C-23	180	6	5	20/25	55/65
PETROLITE C-36	180	7	6	30/35	75/85
PETROLITE PE-100	195	3	6	15/20	45/55
PETROLITE C	180	7	3	22/28	50/60
PETRONAUBA D	185	5	6	20/28	50/60
PETRONAUBA F	180	5	3	15/25	50/60
PETRONAUBA H	195	3	4	15/25	50/60
SYNTHETIC GRADES for POLISHES, CARBON-PAPER, CASTING-WAX, etc.					
PETROLITE C-4500	200	3	4	10/13	30/40
PETROLITE C-7500	205	3	3	10/13	25/30
PETROLITE R-50	190	2	4½	40/50	65/80
PETROLITE P-20	210	2	3	NIL	NIL
PETROLITE P-25	210	2	3	NIL	NIL
PETROLITE W82	180	5	†	23/30	70/85
PETROLITE W95	185	3	†	19/27	50/65
PETROLITE PC13	185	8	5	NIL	NIL
PETROLITE PC44	160	4	5	NIL	NIL
HARD GRADES for COATINGS, COMPOUNDS, POLISHES, etc.					
PETROLITE C-1035	195	3	1½	NIL	NIL
PETROLITE C-200-7	190	4	†	NIL	NIL
PETROLITE C-700	190	4	1½	NIL	NIL
PETROLITE C-200	190	8	†	NIL	NIL
PETROLITE C-500	190	8	2½	NIL	NIL
BE SQUARE 190/195	190	7	1½*	NIL	NIL
BE SQUARE 180/185	180	11	1½*	NIL	NIL
STARWAX 100	180	16	2*	NIL	NIL
PLASTIC GRADES for LAMINATING COATINGS, etc.					
BE SQUARE 170/175	170	20	1½*	NIL	NIL
CERAWELD	155	25	2½*	NIL	NIL
CERATAR	155	30	2½	NIL	NIL
VICTORY	155	30	2½*	NIL	NIL
ULTRAFLEX	145	30	2*	NIL	NIL

*Also available in other colors †Brown

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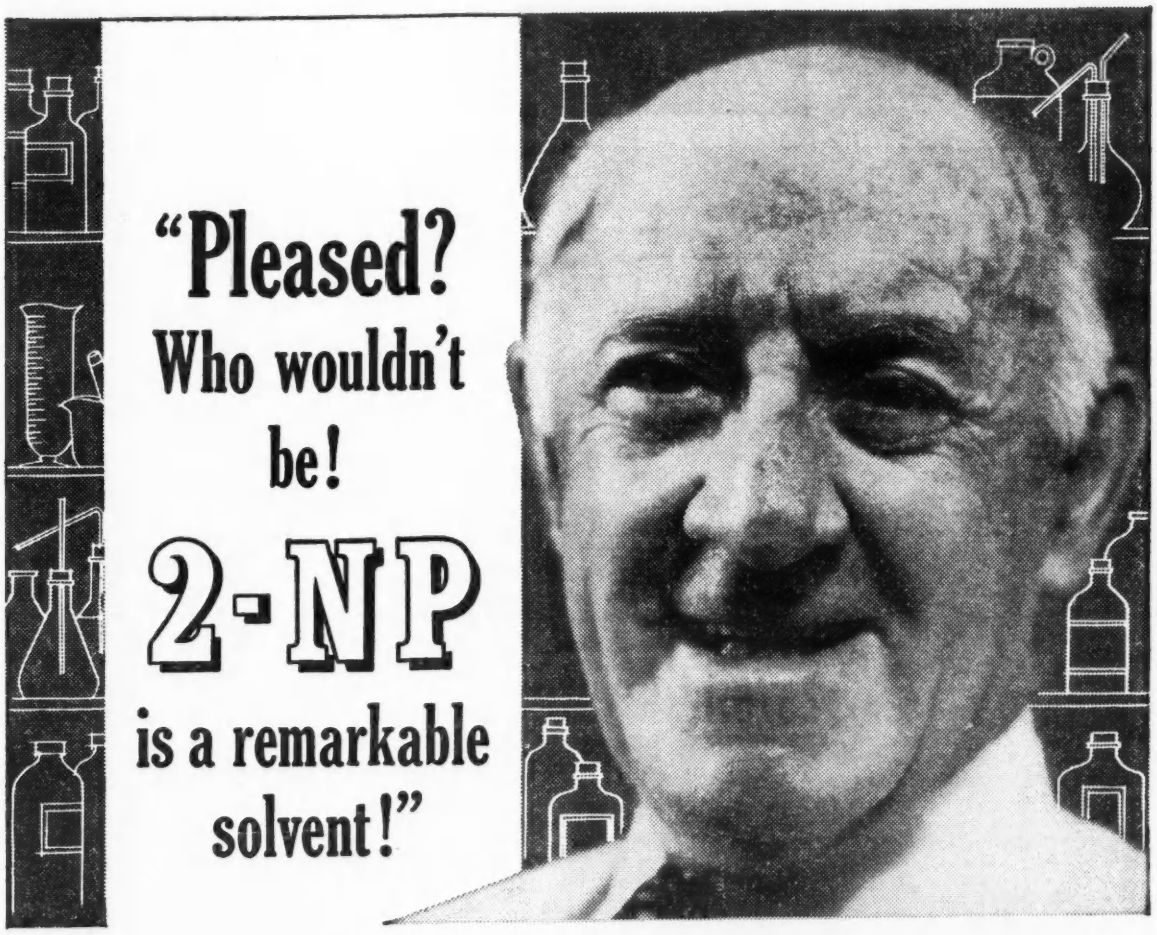
Gilbreath Chemical Co., P. O. Box 549
ATLANTA, GEORGIA,
Atlantic Chemical & Equipment Co., 874 Ashby, N.W.

Mineral orange, American, bbls., c.l., works	lb.	.1660-	.1670
bbls., l.c.l., same basis	lb.	.1760-	.1770
Mineral spirits, petroleum, odorless, tankcars, New Jersey	gal.	.29 -	—
New York	gal.	.305 -	—
Houston, Texas	gal.	.25 -	—
Regular, tankcars, New Jersey and New York	gal.	.18 -	—
Group 3	gal.	.12875-	—
Houston, Texas	gal.	.145 -	—
Mink oil, dms.	lb.	2.75 -	—
Mirbane oil (see Nitrobenzene)			
MNPT maroon toner, kgs., c.l., works	lb.	6.30 -	—
Molasses, blackstrap, feed grade, tanks, New Orleans	gal.	.09¾-	.10
tanks, New York	gal.	.14½-	.16
Molybdated orange, bbls.	lb.	.38 -	—
Molybdenum metal, powd., 80 or 200 mesh, ctns., works	kilo.	7.84 -	—
325 mesh, ctns., works	kilo.	9.13 -	—
Molybdenum trioxide, purif., dms., works	lb.	1.15 -	—
Tech., chemical, dms., works, basis Mo. content	lb.	1.48 -	—
Tech., metallurgical, dms., works, basis Mo. content	lb.	1.47 -	—
Molybdic acid, 85%, dms., works.	lb.	1.05 -	1.15
Monoallylamine, dms., c.l., dlvd	lb.	.96¾ -	—
dms., c.l., dlvd.	lb.	.99¾ -	—
tanks, dlvd.	lb.	.96 -	—
Monobutylamine, dms., c.l., dlvd. E. of Rockies	lb.	.57½-	—
dms., l.c.l., same basis	lb.	.59 -	—
tanks, same basis	lb.	.55 -	—
Mono-tert-butyl-m-cresol, dms., c.l., works	lb.	.55 -	—
dms., l.c.l., works	lb.	.56 -	—
tanks, works	lb.	.54 -	—
Monochloracetic acid, purif. (see Chloroacetic acid, mono).			
Monochlorobenzene, dms., c.l., frt. alld or dlvd. E	lb.	.10½-	—
dms., l.c.l., same basis	lb.	.11½-	—
tanks, same basis	lb.	.08¾-	—
Monoethanolamine dms., c.l. dlvd. E	lb.	.27½-	—
dms., l.c.l., same basis	lb.	.29 -	—
tanks, same basis	lb.	.25 -	—
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine).			
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd. E. 100% basis	lb.	.38½-	—
dms., l.c.l. dlvd. E. 100% basis.	lb.	.40 -	—
tanks, dlvd. E., 100% basis	lb.	.35 -	—
Monoethylaniline (see N-Ethylaniline).			
Monoethylorthotoluidine (see N-Ethyl-o-toluidine).			
Monoisopropanolamine, dms., c.l., dlvd E	lb.	.27½-	—
dms., l.c.l., same basis	lb.	.29 -	—
tanks, same basis	lb.	.25 -	—
Monoisopropylamine, anhyd., dms., c.l., dlvd	lb.	.33½-	—
dms., l.c.l. same basis	lb.	.35 -	—
tanks, same basis	lb.	.31 -	—
Monomethylamine, anhyd., cyls., l.c.l., frt. equald., 100% basis	lb.	.30 -	—
tanks, 100% basis	lb.	.26 -	—
30-35% soln., dms., c.l., frt. equald., 100% basis	lb.	.36 -	—
dms., l.c.l., frt. equald., 100% basis	lb.	.36½-	—
tanks, frt. equald., 100% basis.	lb	.26 -	—
40% soln., dms., frt. equald., 100% basis	lb.	.33 -	—
dms., l.c.l., frt. equald., 100% basis	lb.	.33½-	—
tanks, frt. equald, 100% basis.	lb.	.26 -	—
Monopentaerythritol, tech., bgs., c.l., dlvd. E	lb.	.31 -	—
bgs., l.c.l., dlvd. E	lb.	.32 -	—
Monopotassium glutamate, dms., 1,000-lb. lots, frt. alld	lb.	3.05 -	—
dms, 100-lb lots, same basis	lb.	3.25 -	—
Monosodium glutamate, dms., 100 lbs., dlvd.	lb.	1.00 -	1.15
Monosodium phosphate (see sodium phosphate, monobasic).			
Mono-tert-butyl-m-cresol, dms., c.l., works	lb.	.55 -	—
dms., l.c.l., same basis	lb.	.56 -	—
tanks, same basis	lb.	.54 -	—
Montan wax, Calif., refd., bgs	lb.	.27 -	.28
imp., crude, Bohemian, bgs.	lb.	.22 -	.24
German, bgs.	lb.	.26 -	.27
Morphine, cns.	oz.	12.40 -	12.60
Morphine acetate, anhyd., cns.	oz.	9.95 -	10.00
Morphine hydrobromide, cns.	oz.	9.90 -	9.95
Morphine hydrochloride, NF, cns	oz.	9.90 -	9.95
Morphine sulfate, USP, cns.	oz.	9.90 -	10.05
Morpholine, dms., c.l., dlvd. E	lb.	.55¼-	—
dms., l.c.l., dlvd. E.	lb.	.56¼-	—
tanks, dlvd. E.	lb.	.52¾-	—
Muriatic acid (see Hydrochloric acid).			
Musk, syn., ambrette, fib, dms., 100-lb. lots	lb.	4.40 -	4.90
cns., 25-lb. lots	lb.	4.50 -	5.00
Ketone, fib. dms., 100-lb. lots	lb.	4.60 -	5.10
cns., 25-lb. lots	lb.	4.70 -	5.20
Xylol, fib. dms., 100-lb. lots	lb.	1.26 -	—
cns., 25-lb. lots	lb.	1.40 -	—
Mustard seed, Danish yellow, bags.	lb.	.11½-	—
Montana, yellow, bgs	lb.	.10½-	—
Oriental, bgs.	lb.	.08 -	—
Mustard oil, syn. bots.	lb.	1.60 -	1.85
Myristic acid, bgs	lb.	.31 -	.33
tanks	lb.	.30½-	.32
Myrrh gum, cs	lb.	.55 -	—

N

Naphtha, high solvency (see Solvent naphtha, petroleum).			
Naphtha, petroleum, cleaner's (see Cleaner's naphtha)			
Naphtha, VM&P, petroleum, tankcars, New Jersey and New York	gal.	.19 -	—
Group 3	gal.	.13875-	—
Houston, Texas	gal.	.155 -	—
Naphthalene, crude, dom., 74°, tanks, frt. equald	lb.	.04¼-	—
78°, tanks, same basis	lb.	.05 -	—
imp., 78°, bgs., large lots	lb.	.09½	Nom.
Refd., indust., chipped, crushed, bgs., frt. equald	lb.	.12½-	—
tanks, same basis	lb.	.09¾-	—
Refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis	lb.	.15½-	—
cs., 50 lbs., c.l., same basis.	lb.	.15¾-	—
1-lb. pkgs., c.l., same basis.	lb.	.18½-	—
a-Naphthol, dms., frt. alld.	lb.	1.00 -	—
b-Naphthol, tech., flake, bbls., c.l., works	lb.	.33 -	—
bbls. l.c.l. works	lb.	.35 -	—
Naphthol, fTR, red toner, bbls., works	lb	5.50 -	—
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).			
1-Naphthol-4 sulfonic acid (see Nevile and Winther's acid).			
1-Naphthol-5-sulfonic acid (see L acid).			
1-Naphthol-5-sulfonic 8-amino acid (see S acid).			
2-Naphthol-6,8-disulfonic acid (see Gamma acid).			
Naphthol sulfonic mixed acid (see Cleve's acid).			
a-Naphthylamine, dms., frt. alld	lb.	.50 -	—
b-Naphthylamine, tech., flake, bbls., works	lb.	1.60 -	—
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).			
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).			
2-Naphthylamine-1-sulfonic acid (see Tobias acid).			
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).			
2-Naphthylamine-7-sulfonic acid (see F acid).			
Naringin, fib. dms.	lb.	8.50 -	—
Neatsfoot oil, 15° cold test, dms.	lb.	.30	Nom.
20° cold test, dms.	lb.	.29	Nom.
30° cold test, dms.	lb.	.28	Nom.
Neocinchophen, USP, dms., frt, adjusted	lb.	7.00 -	8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity	gram.	.23 -	—
fib. dms., 100-999-gram lots, basis activity	gram.	.30 -	—
Tech., fib. dms.	gram.	.13½-	—
Neroli oil, NF, French, bots.	lb.	425.00 -	575.00
Tunisian, bots.	lb.	400.00 -	—
Nerolin, cns.	lb.	2.45 -	2.85
Neville and Winther's acid, dms., frt. alld	lb.	1.30 -	—
Niacinamide (see Nicotinamide).			
Nickel acetate, bbls., dlvd	lb.	.68½-	.75½
Nickel carbonate, bbls. dlvd	lb.	.78¼-	.85¼
Nickel chloride, bbls. dlvd	lb.	.37 -	.45
Nickel formate, bbls., ton lots, frt. alld	lb.	.72 -	.73
Nickel metal, electro cathodes, cs., works	lb	.74	—
Nickel nitrate, dms., frt. alld	lb.	.31½-	.33½
Nickel oxide, black, bbls	lb.	.85 -	—
Green, bbls.	lb.	.84 -	—
Nickel sulfate bgs., c.l., dlvd	lb.	.28 -	—
bgs., l.c.l., dlvd	lb.	.28½-	.36
Nicotinamide, USP 50-kilo dm., frt. adjusted	kilo	8.00 -	—
Nicotinamide hydrochloride, dms., frt. adjusted	kilo	8.00 -	—
Nicotine sulfate 40% dealers, 50-lb. dms. frt. alld	lb	1.20 -	—
40% manufacturers 500-lb. dms., frt. alld	lb	1.05 -	—
Nicotinic acid, USP, dms. dlvd	kilo	6.00 -	—
Nicotinic amide, USP (see Nicotinamide)			
Niger seed, bgs	lb	.10¼-	—
Nikethamide cbys.	lb	5.00 -	—
Nitric acid, 38° Be., cbys., c.l., works E.	100 lbs	5.75 -	—
cbys., l.c.l., works E.	100 lbs	6.05 -	6.85
38° Be., cbys., c.l., works E.	100 lbs.	6.25 -	—
cbys., l.c.l., works E.	100 lbs	6.55 -	7.35
40° Be., cbys., c.l., works, E	100 lbs	6.75 -	—
cbys., l.c.l., works, E.	100 lbs	7.05 -	7.85
Nitric acid, 42° Be., cbys., c.l., works, E	100 lbs.	7.25 -	—
cbys. l.c.l. works E	100 lbs	7.55 -	8.35
58.5 to 63%, HNO_3, tanks, works, 100% basis	100 lbs	3.90	—
94½ to 95½% HNO_3, tanks, works, 100% basis	100 lbs	4.90	—
CP, NF, consumer, cbys., extra, c.l., works	lb.	.18½	—
cbys. extra l.c.l. works	lb.	.20	—
5-pint bots. extra cs., c.l. same basis	lb.	22½	—
5-pint bots. extra cs., l.c.l., same basis	lb.	.24	.25
4-Nitro-2-aminophenol tech. paste, dms. frt. alld	lb.	.99 -	—
m-Nitroaniline, cryst. dms., frt. alld	lb	1.15 -	—
Paste dms. frt. alld. 100% basis.	lb.	1.10 -	—
o-Nitroaniline, flaked dms. t.l. frt. alld	lb.	.49 -	—
dms., l.t.l. frt. alld	lb.	.51 -	—
o-Nitroaniline orange toner, kegs,	lb.	1.35 -	—
p-Nitroaniline, dms. frt. alld	lb.	.445 -	—
o-Nitroanisole tech., tanks frt alld.	lb.	.36 -	—
p-Nitroanisole, tech. solid, dms., frt. alld	lb.	.72 -	—



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- ☐ "Roller Coat Vinyl Formulations Made with 2-Nitropropane" — Technical Bulletin No. 4
- ☐ "2-Nitropropane As A Solvent in VAGH Vinyl Coatings"—Technical Bulletin No. 10
- ☐ "Nitroparaffins As Solvents For Vinylite VYNS-3" — Technical Bulletin No. 6
- ☐ "The Nitroparaffins and Their Uses In Coatings" — Technical Bulletin No. 11
- ☐ "Cut Costs of Vinyl Solutions with 2-Nitropropane"—Technical Bulletin No. 7
- ☐ "High Solids Vinyl Formulations with Nitroparaffins" — Technical Data Sheet No. 23B
- ☐ "Formulation of Epoxy Resin Finishes with 2-Nitropropane"—Technical Bulletin No. 23C.

NAME.....TITLE.....COMPANY.....
STREET.....CITY.....ZONE....STATE.....

Industrial Chemicals Department
COMMERCIAL SOLVENTS CORPORATION
260 Madison Avenue, New York 16, N. Y. • Offices in Principal Cities

Nitrobenzene, dbl. dist., dms., c.l., frt. alld	lb.	.13	—
dms., l.c.l., frt. alld	lb.	.14	—
tanks, frt. alld	lb.	.11	—
p-Nitrobenzoic acid, dms., c.l., works	lb.	.63	—
dms., l.c.l., works	lb.	.64	—
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½ ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds. bbls. c.l., works	lb.	.37½-	—
bbls., l.c.l., same basis	lb.	.33½-	.40½
18-20, cps., bbls., c.l., same basis	lb.	.39½-	—
bbls., l.c.l. same basis	lb.	.40½-	.42½
250-400, 600-1,000 seconds, bbls., l.c.l., same basis	lb.	.43	.46
Spirit soluble, 30-35 cps., ¼, ½ seconds, bbls, c.l., same basis	lb.	.43	—
bbls., l.c.l., same basis	lb.	.44	.46
5-6 cps., 40-60 seconds, bbls., c.l., same basis	lb.	.42	—
bbls., l.c.l. same basis	lb.	.43	.45

Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.

o-Nitrochlorobenzene, dms. c.l., frt. alld	lb.	.15	—
dms., l.c.l., same basis	lb.	.16	—
tanks, same basis	lb.	.13	—
p-Nitrochlorobenzene, dms.	lb.	.26	.27
2-Nitro-p-cresol, tech., dms., dlvd.	lb.	.88	—
Nitroethane, dms., c.l., dlvd. E	lb.	.25	—
dms., l.c.l., dlvd E	lb.	.26½-	—
tanks, dlvd. E	lb.	.22½-	—

Nitroethane prices West of Rockies are 1c. higher.

Nitrogen solutions, tanks, frt. equald., N	unit.	1.24	—
Nitrogenous process tankage, bulk, works unit-ton.		4.50	Nom.
Nitrogenous sewage sludge, bulk, f.o.b. Chicago, works unit-ton		3.10	.50
Nitromethane, dms. t.l., dlvd. E	lb.	.25	—
dms., l.t.l., dlvd E	lb.	.26½-	—

Nitromethane prices West of Rockies are 1c. higher.

a-Nitronaphthalene, bbls. frt. alld.	lb.	.31	—
o-Nitrophenol, dms., works, frt. equald	lb.	.94	—
p-Nitrophenol, dms., c.l., frt. alld.	lb.	.45	—
dms., l.c.l., frt. alld	lb.	.47	—
1-Nitropropane, dms., c.l., frt. alld. E. of Rockies	lb.	.23½-	—
dms., l.c.l., same basis	lb.	.25	—
tanks, same basis	lb.	.21	—
2-Nitropropane, dms., c.l., frt. alld. E. of Rockies	lb.	.18½-	—
dms., l.c.l., same basis	lb.	.20	—
tanks, same basis	lb.	.16	—

Nitropropane prices West of Rockies are 1c. per lb. higher.

m-Nitrotoluene, tech., dms., frt. alld.	lb.	.48	—
o-Nitrotoluene, dms., c.l., frt. alld.	lb.	.18	—
dms., l.c.l., frt. alld.	lb.	.16	—
tanks, frt. alld.	lb.	.13	—
p-Nitrotoluene, tech., cast, dms., c.l., works	lb.	.27½-	—
dms., l.c.l., works	lb.	.28	—
flake, dms., c.l., t.l., works	lb.	.27½-	—
dms., l.c.l., works	lb.	.28	—
m-Nitro-p-toluidine, dms.	lb.	1.25	—
Nonylphenol, dms., c.l., frt. alld.	lb.	.22	—
dms., l.c.l., frt. alld	lb.	.23	—
tanks, frt. alld	lb.	.19½-	—

Nonylphenol prices on shipments to Western States are 2c. higher.

Nutmegs, East Indian, whole, bgs.	lb.	1.36	—
West Indian, bgs	lb.	1.45	—
Nutmeg oil, USP, dist., East Indian, cns	lb.	9.50	-12.75
West Indian, cns	lb.	9.50	-12.75
Nux vomica, bls	lb.	.20	—
Powd., bbls., bxs	lb.	.20	.22

O

Ocher (see Iron oxide yellow, nat.).			
Ocotea cymbarum oil, dms	lb.	.48	.55
Octane, indust., tanks, Bayonne, N.J.	gal.	.20	—
Borger, Tex.	gal.	.15¾-	—
1-Octanol, tech., dms., c.l., dlvd., Zone 1	lb.	.43½-	—
dms., l.c.l., dlvd. Zone 1	lb.	.45½-	—
tanks, dlvd., Zone 1	lb.	.41	—
Octyl alcohol, perfumers' grade, bots.	lb.	1.60	2.25
Octyl alcohol, tech. (see 1-Octanol, tech).			
Octyl phenol, bgs., c.l., works	lb.	.22	—
bgs., l.c.l., works	lb.	.22½-	—
tanks, works	lb.	.21	—

Octyl phenol in dms., 1lc. higher.

OILS

Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms.	lb.	.22	.22½
tanks	lb.	.20½-	—
Oleic acid, dbl.dist. (white), dms.	lb.	.18	.20½
tanks	lb.	.15½-	—
S. d., dms.	lb.	.16¾-	.19½
tanks	lb.	.14¼-	—
Oleo oil, extra, dms	lb.	.14½-	.15
Oleostearine, dms.	lb.	.12½-	.13

Oleum (see Sulfuric acid, fuming).

Olibanum gum, siftings, cs.	lb.	.13	.20
Tears, cs.	lb.	.22	.30
Olibanum oil, bots.	lb.	5.00	7.65
Extra fine, bots	lb.	8.00	9.50
Olive oil, edible, dms., spot, duty-paid	gal.	2.30	2.40
Olivine, crude, works	ton.	12.00	—
20 mesh, works	ton.	15.00	—
100 mesh, works	ton.	20.00	—
Opium, USP, cns.	oz.	19.20	-19.48
gran., cns.	oz.	21.65	-21.90
powd., cns.	oz.	21.65	-21.90
Orange oil, expressed, USP, Brazilian, cns., dms	lb.	No stocks.	
California, cns., dms	lb.	.85	.90
Florida, cns., dms	lb.	.68	.90
Messina, cns.	lb.	3.25	5.00
West Indian, bitter, cns., dms.	lb.	2.50	3.25
Sweet, dist., cns., dms	lb.	.60	—
Orange peel, bitter, Haitian, bls.	lb.	.14	.15
Sweet	lb.	.28	.30

ORANGE PIGMENTS

Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns.	lb.	1.80	2.30
Orris root, Florentine, bls.	lb.	.55	—
powd., bbls., bxs.	lb.	.65	—
Verona, bls.	lb.	.35	—
powd., bbls., bxs.	lb.	.45	—

Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid, (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol).
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine).

Ouabain, USP, bots.	gram	3.00	4.00
Ouricury wax, crude, bgs.	lb.	.65	.67
Refd., pure, bgs	lb.	.73	.75
Oxalic acid, bgs., dms., c.l., works.	lb.	.18	.18¼
bgs., dms., 10,000-lb. lots, works.	lb.	.18¼-	.18¾
bgs., dms., smaller lots, works.	lb.	.19¼-	.19¾
b-Oxynaphthoic acid, fib dms., 250 lbs. or more, frt. alld.,	lb.	1.14	1.17
Oxyquinolin sulfate, cns., 100-lb. lots, works,	lb.	4.75	5.00
cns., smaller lots, works	lb.	4.92	5.17

P

Palm oil, clarif., dms	lb.	.1430-	.1530
tanks	lb.	.1185-	—
Palm oil acid, dist., dms.	lb.	.15¾-	.19¼
tanks	lb.	.13¾-	.14¼
Palmarosa oil, cns.	lb.	3.45	3.75
Papain, NF, powd	lb.	5.50	-10.00
Papaverine hydrochloride, nat. or syn., USP, cns. 25-oz. to 100-oz. lots	oz.	5.00	—
cns., smaller lots	oz.	5.05	5.20
Papaverine sulfate, nat. or syn., USP, cns.,	oz.	7.10	7.35
Paprika, Bulgarian bgs	lb.	.34	.35
Hungarian, bgs.	lb.	.32	—
Spanish, bgs.	lb.	.50	—
Yugoslavian, bgs.	lb.	.34	—

Para-aminobenzoic acid (see p-Aminobenzoic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).

Para toner, red, bbls	lb.	1.36	—
Chlorinated, kgs.	lb.	1.35	—
Paraffin, crude, scale, white, 123°-127°F. ASTM, tanks, refy.	lb.	.0655-	—
Paraffin, fully refd., 122°-124°F. ASTM., tanks, refy	lb.	.0765-	—
125°-127°F. ASTM, tanks, refy.	lb.	.0765-	—
130°-132°F. ASTM, tanks, refy.	lb.	.0765-	—
132°-134°F., ASTM, tanks, refy.	lb.	.0765-	—
135°-137°F., ASTM, tanks, refy.	lb.	.0765-	—

AMP temperatures are an arbitrary 3°F. higher than ASTM

Paraffin oil, pale, 100-110 vis., at 100°F., tanks, east coast refy	gal.	.14	—

Paraffin wax (see Paraffin).

Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld	lb.	.10	—
bgs., l.c.l., frt. alld	lb.	.12	.13
91%, powd., bgs., c.l., ex whse.	lb.	.1715-	—
bgs., l.c.l., ex whse	lb.	.1665-	—
USP-X, fib dms., c.l.	lb.	.19	—
fib dms., 1,000-lb. lots	lb.	20	—
fib. dms., smaller lots	lb.	.21½-	—

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LAUNCH A NEW TREND IN PACKAGING—Thanks to Hi-fax®, Hercules high-density polyethylene, major light-duty, liquid detergent manufacturers are now switching to modern plastic bottles. Consumer preference for plastic has long been known—these bottles are more attractive, have a luxurious "feel", can be appealingly colored. And, of course, they are unbreakable. The switch to plastic had to wait for the development of Hi-fax, high-density polyethylene, the first material able to meet the strict standards of quality set by the detergent industry. Illustrated is the new Hi-fax container used for ***Trend***, a product of Purex Corporation, Ltd., 9300 Rayo Ave., South Gate, Calif.

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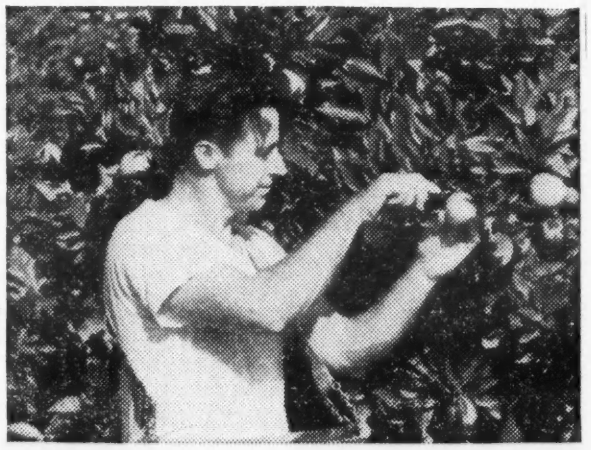

HERCULES

HERCULES POWDER COMPANY
INCORPORATED
900 Market Street, Wilmington 99, Delaware

CHEMICAL MATERIALS FOR INDUSTRY

659-B

Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd. lb. .14 • —
55-gal. dms., l.c.l., dlvd lb. .15 • —
tanks, dlvd. ..... lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene.
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol)
Parathion, ethyl, dms. frt. alld. lb. .84 • —
Parathion prices 2c. per lb. higher in West.
Paratoluenesulfonamide (see p-Toluenesulfonamide)
Paris green, dealers, 100 lb. dms., frt. alld lb. .45 • —
Passion flower herb, bls. ..... lb. .40 • .45
Patchouli oil, imp., cns ..... lb. 4.80 • 5.25
Peach kernel oil, USP (see Apricot kernel oil)
Peacock blue, fugitive, 100% color strength, 250-lb., bbls., dlvd. E. of Rockies lb. 1.00 • —
Peacock blue price 1c. higher W. of Rockies.
Peanut meal, 45%, old process, bgs., mills ..ton 69.50 Nom.
Peanut oil, crude, tanks, f.o.b. mills. lb. .13 • —
Refd., dms. ..... lb. .18¼- .18½
tanks ..... lb. .16¼- —
Pectin, dom. NF, citrus, powd., bbls. lb 2.05 • 2.06
Dom., tech., powd., 150 jelly grade. lb. 1.28 • —
Imp, Danish, ex whse ..... lb. 1.28 • —
Penicillin potassium cryst., bulk... 1,000,000 units. .021 • .025
Penicillin procaine cryst., bulk... 1,000,000 unis. .021 • .025
Pennyroyal oil USP, imported, cns. lb. 2.25 • 3.10
Pentachlorophenol, bgs., c.l., t.l., works, frt equald lb. .21 • —
bgs., l.c.l., same basis ..... lb. .22½- .29
Pentachlorophenol in dms. 1c. higher.
Pentaerythritol, tech., bgs., c.l., dlvd lb. .31 • —
bgs., l.c.l., dlvd ..... lb. .32 • —
Pentaerythritol, di-and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex. refy. gal. .14 • —
Pentobarbital, dms., 100 lbs. or more lb. 6.00 • —
Pepper, black, Malabar, bgs ... lb. .24¾- —
Lampong, bgs. ..... lb. .24½- —
Red, Funtuas, bgs ..... lb. .30 • —
Japanese, Hontaka, bgs ..... lb. .30 • —
Santaka, bgs. ..... lb. .30 • —
Sudanese, bgs. ..... lb. .36 • —
White, Muntok, bgs ..... lb. .45 • —
Peppermint leaves, dom., USP, bls., dms lb. .70 • .75
Imp., USP., bls ..... lb. .85 • —
Peppermint oil, nat., dms. ..... lb. 4.00 • 5.00
Redist., USP, dms. ..... lb. 4.25 • 5.50
Perchloroethylene dms., c.l. or t.l., dlvd lb. .13½- —
dms., l.c.l., dlvd ..... lb. .15¼- —
tanks, dlvd. ..... lb. .11¾- —
tanktruck, 1,000 gal. min. dlvd. lb. .12¼- —
Peri acid, dry, bbls. frt. alld lb. 1.60 • —
Paste, bbls., frt. alld ..... lb. 1.55 • —
Peru balsam, dms. ..... lb. 1.25 • 1.80
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil, South American, cns., dms lb. 2.45 • 3.20
Petrolatum, cream, dms., c.l., refy. lb. .08125- —
dms., l.c.l., dlvd. ..... lb. .10125-.11375
tanks, refy ..... lb. .05875- —
Extra amber, dms., c.l., refy. .. lb. .07125- —
dms., l.c.l., dlvd. ..... lb. .09125-.10375
tanks, refy ..... lb. .04875- —
Lily white, dms., c.l., refy.... lb. .08625- —
dms., l.c.l., dlvd. ..... lb. .10625- .12
tanks, refy ..... lb. .06735- —
USP, snow white, dms., c.l., refy. lb. .09125- —
dms., l.c.l., dlvd. ..... lb. .11125- .125
tanks, refy ..... lb. .06875- —
USP, soft yellow, dms., c.l., refy. lb. .07125- —
dms., l.c.l., dlvd. ..... lb. .095 - .10375
tanks, refy. ..... lb. .04875- —
Petroleum pitch (see Asphalt, petroleum)

PETROLEUM PRODUCTS
Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works lb. .16½- .18¾
non-ret. dms., l.c.l., works lb. .17½- .19
tanks, works lb. .14½- .17
50-55%, sulfuric content, non-ret. dms., c.l., works lb. .16 • —
non-ret. dms., l.c.l., works lb. .17 • —
tanks, works ..... lb. .13 • —
o-Phenetidine, dms. c.l., frt alld. E lb. .91 • —
dms., l.c.l., same basis ..... lb. .93 • —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.05 • —
dms. same basis ..... lb. 1.08 • —
Phenobarbitol USP, dms., 100-lb. lots lb. 3.25 • —
Phenobarbital-Sodium (see sodium phenobarbital)
Phenol, 90-92% (cresol 8-10%) non-ret dms. frt alld. E of Rockies lb. .16¾- —
non-ret dms. l.c.l. same basis. lb. .17¾- —
tanks, same basis ..... lb. .14¾- —
82-84% (cresol 16-18%) non-ret, dms., c.l., same basis lb. .16½- —
non ret. dms. l.c.l., same basis. lb. .17½- —
tanks, same basis ..... lb. .14½- —
30°C. or above, tar distilled, non-ret. dms., c.l., same basis. lb. .18 • —
non-ret dms. l.c.l., same basis. lb. .19 • —
tanks, same basis ..... lb. .16 • —
USP, syn., dms., c.l., t.l., frt. alld lb. .18½- —
dms., same basis ..... lb. .20½- —
tanks, same basis ..... lb. .16½- —
Phenolphthalein, USP or yellow, 250-lb dm. 2,000 lbs., frt. alld. lb. 1.30 • —
250-lb. dm., same basis ..... lb. 1.35 • —
Phenothiazine drench fib dms., t.l., dlvd lb. .44 • —
fib. dms. t.t.l., same basis lb. .47 • —
NF, fib. dms., t.l., same basis lb. .43 • —
fib. dms., t.t.l., same basis lb. .46 • —

Phenyl acetate, dms., 100-lb. lots, works lb. .50 • —
Phenyl salicylate (see Salol).
Phenylacetaldehyde, soln., 50%, bots. lb. 2.35 • —
100%, bots. ..... lb. 4.00 • 4.65
Phenylacetic acid, pure, cryst., cns. lb. 1.25 • 1.75
dl-Phenylalanine, dms. works.... lb. 27.00 • 37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib. dms. 200-lb. lots dlvd E. lb. 3.45 • —
fib. dms., smaller lots, dlvd. E lb. 3.80 • —
N-Phenyldiethanolamine, dms., c.l., dlvd. E lb. .41 • —
dms., l.c.l., dlvd. E. ..... lb. .42½- —
tanks, dlvd. E. ..... lb. .38½- —
m-Phenylenediamine, dms., frt. alld. lb. 1.10 • —
o-Phenylenediamine, comi., 100 to 1,000 lbs., fib. dms., works lb. 1.70 • 1.80
p-Phenylenediamine, refd., dms., works lb. 1.42 • —
Tech., dms., works ..... lb. 1.40 • —
Phenylethanolamine, dms., c.l., works lb. .75½- —
dms., l.c.l., same basis ..... lb. .77 • —
Phenylethyl acetate bots. ..... lb. 1.25 • 1.40
2-Phenylethyl alcohol, extra, dms. lb. 1.14 • 1.50
Standard, dms. ..... lb. 1.10 • 1.60
b-Phenylethylamine, dms., 20,000 lbs. or more frt. alld lb. 1.50 • —
dms., smaller lots, frt. alld lb. 1.70 • 1.85
Phenylethylphenyl acetate, bots lb 4.00 • 4.25
Phenylglyconic acid (see Mendelic acid).
Phenylhydrazine, 97%, 450-lb. dms. lb. 1.45 • —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd. E lb 1.80 • —
fib, dms., smaller lots, dlvd. E lb. 2.10 • —

o-Phenylphenol, dms., l.c.l., works. lb. .48 • .50
p-Phenylphenol, bgs., c.l., works lb. 38½- —
bgs., l.c.l., works ..... lb. .43 • —
Philippine copal gum, pale, chips, bgs lb. .23¾ .26
nubs, bgs. ..... lb. .33¼- .37
seeds, bgs. ..... lb. .20 Nom
sorts, bgs. ..... lb. .22¾ .25
Phloroglucinol, coml., fib. dms., works lb 6.40 • —
CP, bots., works ..... lb 17.75 • —
Tech., fib dms., works .... lb.10.45 • —
Phloxin red toner (see Eosin red toner).
Phosgene, ret. cyls., works ... lb. .15½- —
Phosphate, defluorinated (see under D)
Phosphate rock, Curacao, Atlantic ports New Orleans ton 48.00 • —
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l. mines short-ton. 4.798 • —
68-70%, b.p.l., bulk, c.l., same basis short-ton. 5.148 • —
70-72% b.p.l., bulk, c.l. same basis short ton. 5.728 • —
74-75%, b.p.l., bulk, c.l., same basis short ton. 6.628 • —
76-77% b.p.l., c.l., bulk. same basis short ton. 7.518 • —
Above Florida prices are based on fuel oil at $2.37 per bbl. and labor at $1.59.

Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald 100 lbs 7.00 • —
cbys., l.c.l. same basis 100 lbs 7.25 7.75
tanks, t.w., works 100 lbs 5.50 • —
80%, cbys., c.l., frt equald 100 lbs 7.85 —
cbys., l.c.l., works 100 lbs 8.10 9.35
tanks, t.w., works 100 lbs 6.00 • —
NF, 85%, cbys., c.l., works 100 lbs. 8.50 • —
cbys., l.c.l., works 100 lbs 8.75 9.00
tanks, t.w., works 100 lbs 6.65 • —
Phosphorus, amorph., red, dms., t.l. works lb. .55 • —
dms., smaller lots, works lb. .53 • .57
white (yellow), solid dms., c.l., works, frt equald lb. .20 • .20¼
dms., l.c.l., works, frt. equald lb. .21½- —
tanks, works, frt equald lb. .19 • —
Phosphorus oxychloride, dms., c.l., works lb. .14 • —
dms., l.c.l., works ..... lb. .15 • —
tanks, works ..... lb. .12½- —
Phosphorus pentasulfide, powd., dms., c.l. works lb. .13½- —
dms., l.c.l., works ..... lb. .14½- 15½
Solid, dms., c.l., works ..... lb. .11½- —
dms., l.c.l., works ..... lb. .12½ 13¼
Phosphorus pentoxide, dms., c.l., works lb. .1375- .1475
dms., l.c.l., works ..... lb. .1475- .1675

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Phosphorus sesquisulfide dms., cs., c.l., works lb. .38 - —
dms., l.c.l., works lb. .39 - .40
Phosphorus trichloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phthalic anhydride bgs. c.l., works, frt. equald lb. .17 - .19
bgs., l.c.l., same basis lb. .18 - .20
tanks, same basis lb. .16½- .18½
Phthalimide, 97-98%, dms., frt. alld lb. 65 - —
Phthalocyanine blue, full strength, bbls dlvd. E. of Rockies lb 2.90 - —
Resinated, bbls., same basis lb 2.75 - —
Water dispersable, bbls., same basis lb 1.52 - —
Phthalocyanine blue prices 1c. higher W. of Rockies
Phthalocyanine green toner, bbls., works lb 3.35 - —
Resinated, bbls lb 3.00 - —
Water dispersable, bbls lb 1.71 - —
Phthalocyanine green prices 1c. higher W. of Rockies
Phthalylsulfacetamide, fib dms., 1,000 lb lots or more lb 5.00 - —
NF fib dms lb 5.20 - —
α-Picoline dms. c.l., works, frt. equald lb 43 .43½
dms., l.c.l. works frt equald lb 44 — —
tanks same basis lb 415 422
β-Picoline 98% dms. t.l. works lb 1.05 - —
dms., l.c.l., same basis lb 1.15 - —
tanks, same basis lb. 95 - —
γ-Picoline dms. c.l., works lb .32½- —
dms l.c.l. works lb .33 - —
α-Picoline, dms., f.o.b., works lb 1.60 - —
tanks, t.l. same basis lb 1.50 - —
Picric acid, NF bbls lb .85 - —
Tech bbls lb 44 - —
Pigment green B, dms lb 1.45 - —
Pilocarpine hydrochloride, USP, bots oz 5.25 - —
Pilocarpine nitrate USP bots vials oz 5.15 - —
Pimento, Jamaican, bgs lb 68 - —
Mexican, bgs lb .57 - —
Pimento berry oil NF dms lb 3.75 9.25
Pimento leaf oil, crude, cns lb 2.10 2.48
Pine oil, dest dist, dms., l.c.l. works lb 15 —
dms. l.c.l. ex whse New York lb 173 —
Steam-dist., dms., ex whse., New York lb .185 - —
dms, dlvd lb 188 —
Pineneedle oil, Siberian (see Abies Sibirica oil)
Pinetar oil comi. dms. c.l. works lb 0561- —
dms, l.c.l. works lb 0634- —
dms, c.l. ex whse New York lb 0745- —
tanks, works lb 046 —
Pinetar oil, NF, rectified, dms., incl., l.c.l., works, South. lb. .40 - —
dms. l.c.l. ex whse New York lb 41½- —
Refd. dms. incl. l.c.l works lb 35 - —
dms incl l.c.l. ex whse New York lb 36½- —
Pink root, bls lb 1.75 - —
Piperazine anhyd. dms. t.l. frt. alld lb 1.80 - —
dms., l.c.l., same basis lb. 1.85 - —
Piperazine citrate 36% dms 1,000 lbs. or more frt alld lb 1.15 - —
Piperazine dihydrochloride 51% dms. 1,000 lbs or more frt alld lb 1.23 - —
Piperazine hexahydrate 44% dms. 1,000 lbs. or more, frt. alld lb. .86 - —
dms., 200-800 lbs., frt. alld lb. .89 - —
Piperazine phosphate 42% dms. 1,000 lbs. or more frt. alld. lb 1.06 - —
Piperidine dist. 98% min. dms., frt. equald lb 2.60 - —
Piperonyl butoxide dms dlvd. E lb 4.50 5.05

PITCHES

Pitch quotations are listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum)
Platinum metal, works oz 76.00 - 80.00
Pleurisy root, bls lb 45 50
Podophyllum resin NF dms lb 15.60 —
Poke root, bls lb 19 22
Polymyxin bulk, bots. 50 billion units or more 1,000,000 units 32 —
bulk, bots. 25-50 billion units, 1,000,000 units 54 - —
bulk, bots. 1-25 billion units, 1,000,000 units 56 - —
Polyoxyethylene sorbitan monostearate, dms 20,000-lb lots, works lb 42 —
dms. 10,000-20,000 lb lots, works lb 44 - —
dms smaller lots, works lb 47 49
Polyoxyethylene sorbitan tristearate, dms. 20,000 lb lots, works, lb 42 —
dms. 10,000-20,000 lb. lots, works lb 44 —
dms smaller lots, works lb 47 49
Pontianak copal gum chips bgs lb .26 —
Nubs bgs lb .17 40
Poppy seed, Argentine bgs lb No stocks.
Dutch, bgs. lb .22 —
Danish bgs. lb .20½ —
Polish bgs lb 20 —
Turkish, bgs. lb .17½ —
Potash caustic liq. 45% basis dms. c.l., works 100 lbs 4.25 —
dms l.c.l. same basis 100 lbs 5.05 - —
tanks same basis 100 lbs 3.70 - —
reg., flake, 88-92%, dms., c.l., same basis 100 lbs. 9.15 - —
dms., l.c.l., same basis 100 lbs 10.20 —
solid, 88-92%, dms., c.l., works, 100 lbs. 8.70 - —
dms c.l. works 100 lbs 9.75 - —
Potassium acetate NF 200-lb dm., f.o.b works E lb .31 - —
Potassium bicarbonate USP gran dms lb .22 - —
USP, powd. dms lb .24 - —
Potassium bichromate, gran., bgs., c.l., t.l., works lb .18 - —
bgs., l.c.l. works lb .18½ 19¾
Potassium bichromate in dms. 2c higher.
Potassium bitartrate, gran., powd., 100-lb. bgs., c.l., frt. equald lb. .37 - —
100-lb bgs. 5,000 lbs. 1 shipt., same basis lb. .38 - —
100-lb bgs., smaller lots, same basis lb. 40 - —
Potassium borohydride powd. dms. works lb 16.00 22.00
Pelletized potassium borohydride $1.25 per lb higher in 1,000-lb. lots.

Potassium bromate, dms., 1,000-lb. lots or more, works lb. .50 - —
dms., smaller lots, works lb. .52 - .62
Potassium bromide, USP, gran., bbls., kgs lb. .39 - .40
Potassium carbonate, dom., NF, gran., bbls., dms lb. .20 - —
Dom., tech. powd., bbls., dms lb. .21 - .22
Dom., calcinated, bgs., c.l., works, 100 lbs. 8.50 - —
bgs., l.c.l., same basis 100 lbs. 9.55 - —
Potassium carbonate, hydrated, 83-85%, bgs., c.l., works, 100 lbs. 7.10 - —
bgs., l.c.l., works 100 lbs. 8.15 - —
Potassium chlorate, cryst., dms., c.l., works lb. .12¼- —
dms., l.c.l., works lb. .13½- .14½
Powd., dms., c.l., works lb. .12¾- —
dms., l.c.l., works lb. .14 - .15
works lb .12¼- —
NF, cryst., dms., 2,000 lbs. or more, works lb. .16¾- —
NF gran 25-lb metal dms lb. .36 - —
NF powd. dms., 2,000 lbs or more, works lb. .17¼- —
Potassium chloride indust., 99.9% KCL, bulk, c.l works ton 29.00 - —
bgs., c.l., works ton 33.50 - —
99.3% KCL bulk, c.l., works ton 27.00 - —
bgs. c.l works ton 31.50 - —
USP, cryst., dms. lb. .20 - .22
USP, gran., dms. lb. .21 - .23
USP, powd. dms lb. .24 - .26
Potassium chloride, agricultural (see Potassium muriate)
Potassium chromate tech. dms., works lb. .50 - .51
Potassium citrate, NF, gran., 250-lb. dm., f.o.b. works E lb. .43 - —
powd. 250-lb dms. same basis, lb. .46 - —
Potassium cyanide, dms 20,000-lb. lots or more, works lb. 42½- —
dms. 2,000-19,999 lb lots, works, lb. .43 - —
dms. smaller lots, works lb .44 - .44½
Potassium dichromate (see Potassium bichromate)
Potassium ferricyanide, dms., ton lots, works lb. .50 - —
dms., smaller lots works lb. .65 - —
Potassium ferrocyanide, dms., ton lots lb. 24½- —
dms. smaller lots lb .29 - —
Potassium fluoborate fib dms., c.l., works lb .30 - —
fib dms l.c.l. works lb .31 - —
Potassium fluoride dms works lb .37 - .38
Potassium gluconate, 100-lb dm., f.o.b works E lb 1.67 - —
Potassium guaiacol sulfonate, NF, dms lb 2.10 2.30
Potassium hydroxide tech (see Potash caustic)
Potassium hydroxide, USP, pellets, 100-lb dms, 1 to 100-dm. lots lb. .33½ .38
Potassium hypophosphite, NF fib. dms. 1,000 lb lots lb 1.38 - —
Potassium iodide USP cryst., gran., or powd., 250-lb dm., f.o.b. works lb. 1.40 - —
Potassium manure salt, 22% K.O. bulk, c.l. works unit-ton .17 - .1765
Potasstium metabisulfite gran. dms. lb. .16 - —
Powd. dms lb .27 - —
Potassium muriate, standard bulk, c.l., works unit-ton. .32 - .34
bagged, 60% minimum K.O same basis ton 24.10 -25.30
Gran., bulk, c.l., works unit-ton. .32½- .34½
bagged 60% minimum K.O same basis ton 24.40 -25.00
Inside prices apply to material contracted for prior to July 1, 1959.
Outside prices apply to material contracted for after that date but also for delivery during the current month
Potassium nitrate, NF, cryst., bbls., 20-ton lots 100 lbs 17.00 —
bbls. smaller lots 100 lbs 18.00 19.00
NF gran bgs 20-ton lots 100 lbs 9.50 —
bgs smaller lots 100 lbs 11.00 12.00
NF powd bgs. 20-ton lots 100 lbs 10.50 —
bgs smaller lots 100 lbs 12.00 13.00
Potassium oxalate, neutral, tech., fine gran, powd 300-lb dm., f.o.b works E lb. .32 - —
Potassium pentaborate, gran., dms., c.l works ton 219.50 —
dms. ton lots ex whse ton 311.00 —
dms. smaller lots ex whse ton 316.00 —
Powdered potassium pentaborate $10 per ton higher
Potassium perchlorate, dms., c.l., works lb .18½ —
dms., l.c.l., works lb 19 20
Potassium permanganate comi. kgs., works lb. .25 .33
USP, dms., works lb. 29 - .35
Potassium persulfate dms., c.l., works lb. .17½ —
dms l.c.l. works lb .18 21
Potassium pyrophosphate, tetrabasic, dms., works lb. 15½ 18½
Potassium prussiate red (see Potassium ferrocyanide)
Potassium prussiate yellow (see Potassium ferrocyanide)
Potassium silicate, electrical grade, 30° Be. 1:2.0, dms., c.l., works 100 lbs 6.50 - —
dms. l.c.l. 5 dm lots or more, works 100 lbs. 7.25 7.65
tanks, works 100 lbs. 6.15 - —
40.5° Be. 1:2.1 dms. c.l., works 100 lbs. 5.95 - —
dms. l.c.l., 5 dm lots or more works 100 lbs 6.70 - —
tanks, works 100 lbs 5.60 - —
Glass grade, bgs., c.l., works 100 lbs. 17.20 -18.15
bgs l.c.l. works 100 lbs 17.80 —
Soln., 29° Be, 1:2.5, dms., c.l., works 100 lbs. 4.95 - —
dms. l.c.l., 5-dm lots or more works 100 lbs 5.70 - —
tanks, works 100 lbs 4.60 - —
Potassium silicofluoride, bgs., works lb. .09½- 10
Potassium silicofluoride in drums, 0.4c per lb higher
Potassium stannate dms. frt alld. E lb. .776 - .848
Potassium sulfate agricultural bulk, c.l., works unit-ton. .64½- .66½
Inside price applies to tonnage contracted for prior to July 1, 1959
Outside price applies to tonnage contracted for after that date but also for delivery during the current month

Potassium sulfate, NF VII, cryst., dms lb. .31 - .33
NF VII, gran., dms lb. .18½- —
NF VII, powd., dms lb. .16 - .17
Potassium sulfocyanate, NF, cryst. (see Potassium thiocyanate).
Potassium thiocyanate, NF, cryst., dms., works lb. .96 - .98
Tech., dms., works lb. .77 - .79
Potassium titanate, ctns., c.l., works, lb. .16¼- —
ctns., 5-ton lots, works lb. .16½- —
ctns., 1-ton lots or less, works lb. .16¾- —
Potassium-magnesium sulfate, basis 40%K_2SO_4 and 18% MgO, bulk, works, base price ton 13.45 - —
bulk, works, July forward ton 14.00 - —
Potassium-sodium tartrate, NF, gran. or powd., 250-lb. dms., c.l., f.o.b. works E lb. .42½- —
250-lb. dms., 5,000-lb. lots, same basis lb. .43 - —
250-lb. dms., same basis lb. .43½- —
Potassium-titanium fluoride, fib. dms., works lb. .39 - .40
Potassium-zirconium fluoride, fib. dms., c.l., works lb. .50 - —
fib dms. l.c.l., works lb. .52½- .55
Pregnenolone, bots gram No prices
Pregnenolone acetate, bots. gram No prices
Procaine hydrochloride USP dms., 1,000-lb. lots, frt. alld lb. 2.25 - —
dms. 100-500 lb lots lb 2.95 3.15
Progesterone, USP bots. gram No prices.
Progesterone acetate bots. gram No prices.
Propenyl guaethol, dms lb 24.30 -27.00
Propionic acid syn. pure dms., c.l., works lb. .23¼- —
dms., l.c.l., works lb. .24¼- —
tanks, works lb. .20¾- —
n-Propyl acetate dms., c.l., dlvd. lb. .14¾- —
dms., l.c.l., dlvd. lb. .16¼- —
tanks, dlvd. lb. .12¼- —
n-Propyl alcohol, dms., c.l., dlvd lb. .14 - —
dms., l.c.l., dlvd. lb. .15½- —
tanks, dlvd lb. .11½- —
n-Propyl gallate, dms., 100 to 2,000-lb lots, works lb 3.90 4.40
n-Propyl-p-hydroxybenzoate USP, dms lb 2.30 2.40
Propyl thiouracil bots., 50 kilo lots or more kilo 55.00 —
bots., smaller lots kilo 55.10 -55.30
β-Propylamine, dms., c.l., dlvd lb 1.24 - —
dms., l.c.l., same basis lb 1.255 - —
Propylene dichloride, consumers' dms., c.l., dlvd. E lb. .0845- —
dms., l.c.l., same basis lb. .0995- —
tanks same basis lb 07 - —
Propylene dichloride prices in West 1c. higher, same basis.
Propylene glycol, indust., dms., c.l., dlvd E lb. .16 - —
dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .13½- —
USP, dms., c.l. dlvd. E lb. .18 - —
dms., l.c.l., same basis lb. .19½- —
tanks, same basis lb. .15½- —
Propylene glycol methyl ether, dms., c.l., dlvd lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Propylene oxide, dms., c.l., dlvd. E. lb. .18 - —
dms., l.c.l., dlvd. E lb. .19½- —
tanks, dlvd E lb. .15½- —
Psyllium seed, black, bgs lb. .30 - .35
Blonde bgs. lb. .18 - .20
Husks, bgs. lb. .42 - .45
Pumice, dom., grd., coarse to fine, 0 ½- 1, 1½, 2, 3, bgs., ton lots lb. .03⅝- .04¼
bgs. smaller lots lb. .03⅞- —
Imp., Italian, silk-screen, coarse, bgs., ton lots lb. .03½- —
fine, bgs ton lots lb .04 - —
sun dried, coarse, bgs ton 60.00 - —
fine, bgs ton 60.00 -70.00
Pumpkin seed, bgs. lb. .25 - .26
Pyrethrins, syn (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bgs., ton, works lb. .50 - —
Powd., 1.3% pyrethrins, bags, ton, works lb. .71 - —
Pyrethrum liquid, 20:1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal. 9.60 - 9.80
100:1 basis (10 grams pyrethrins per 100cc odorless base), dms., works gal. 45.90 -46.90
Pyrethrum oleoresin, dewaxed, 20% dms., works lb. 11.00 -11.35
purif., 20%, dms., works lb. 11.00 -11.35
Pyridine, denat., dms c.l., works and frt equald gal 2.77 - —
dms l.c.l same basis gal 2.80 - —
Refd., 2°, non ret, dms., l.c.l., same basis to. .70 - —
tanks, same basis lb. .65 - —
Pyridoxine hydrochloride USP, 500-gram bots., dms., f.o.b. works, kilo. 175.00 - —
Pyrites, Canadian, 48-50% S, mines, long-ton 5.00 6.00
Pyrocatechol (see Catechol)
Pyrogallic acid (see Pyrogallol).
Pyrogallic acid, tech., bbls. lb 3.17 - 3.25
Pyrogallol, NF 100 lb dms. lb 3.50 - —
Pyroxylin, USP bots. lb 9.50 - —

Q

Quassia chips lb. .10 - —
Quicksilver (see Mercury metal)
Quince seed, bgs lb. 1.15 - 1.50
Quinidine sulfate, USP, cns oz. .74½- 77
Quinine, NF, cns, 100-oz lots oz. .34 Nom.
Quinine bisulfate, USP cns oz. .27½ 29
Quinine hydrochloride cns. oz. .23 - .25
Quinine sulfate, USP, cns oz. .24½- .26
Quinoline, dms c.l., frt. equald lb. .50¼ —
dms., l.c.l., same basis lb. .51¼- —
tanks, same basis lb. .50 - —

R

Rape salt, paste dms frt alld., 100% basis lb. .98 - —
Powd., frt, alld, 100% basis lb. 1.08 - —
Rapeseed oil, dms. lb. .15 - .15¼
tanks lb. .13 - —
Rare earth chloride, 46%, dms., dlvd lb. .25 - —
Rare earth oxalate, 45-50%, bgs., works lb. 1.15 - —
Rauwolfia serpentina root, powd., bbls, dms lb 1.00 - 1.20
Red carmine No. 40 (see Carmine).
Red oil (see Oleic acid)

RED PIGMENTS

Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide, red)
Reserpine, cryst., bots gram 1.25 - —
Resorcinol, tech grade, dms., c.l., works, frt equald lb. 77½- —
dms., l.c.l., same basis lb 78½- —
USP, powd., dms., works lb. 2.95 - —
Resorcinol monoacetate, NF, dms. lb. 2.50 - —
Rhatany root, bgs. lb. .14 - .16
Rhodamine red toner, molybdated, PMA, kgs., works lb. 6.00 - —
Tungstated, PTMA, works, kgs lb. 6.60 - —
Rhodinol, 5-lb. cans lb. 42.00 -51.00
Synthetic lb. 14.00 -16.00
Rhubarb root, India, whole, bgs lb. .25 - —
powd., bgs. lb. .35 - —
Riboflavin, USP, fib. dms., kilo or more, dlvd kilo. 36.00 - —
Riboflavin, USP, readily soluble, bots., dlvd kilo. 130.00 - —
Riboflavin, 5-phosphate-sodium fib. dms., kilo or more dlvd. kilo. 104.50 - —
Rice bran oil, clarified, dms. l.c.l. lb. .14½- .15
tanks, dlvd. E lb. .12½- —
Ricinoleic acid (see Castor oil acids split).
Rochelle salt (see Potassium sodium tartrate).
Roofing pitch (see Coaltar pitch roofing).
Rose oil, nat., Bulgarian bots oz 72.00 —
Turkish, bots. oz. 55.00 -58.00
Rosemary oil, Spanish, NF, cns., Spanish, tech., cns., dms. lb .97 - 1.20
Rosin, gum and wood (see Naval Stores in Protective Coatings market)
Rotenone, fib. dms., works, unit-lb. .12 - —
Resin, 25-45% fib dms. works, unit-lb. .12 - —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs., ton lots same basis lb. .04¼- —
Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875- —
Houston, Texas gal. .155 - —
Rue oil, bots. lb 2.75 3.00
Rutin, NF fib dms., 10 kilo lots kilo. 13.75 - —
fib dms., 5 kilo lots kilo 14.00 - —
fib dms., 1 kilo kilo. 14.50 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis lb. .24 - —

S

S acid, bbls., works lb. 3.25 - —
Sabadilla seed, activated, ground with lime, bbls lb. .42 - .44
Saccharin, calcium, fib dms., 1,000-lb. lots, works lb 2.50 - —
USP, gran., soluble dms., 1,000-lb. lots lb. 1.40 - —
dms., smaller lots lb. 1.50 - —
Saccharin, USP, powd., soluble, insoluble, dms., 1,000-lb. lots lb. 1.45 - —
dms., smaller lots lb. 1.55 - —
USP, powd., insoluble, dms., 1,000-lb. lots lb. 1.43 - —
dms., smaller lots lb. 1.53 - —
Safflower oil, dms., New York lb. .1785- .1830
tanks, Atl. Coast lb. .1585- —
Saffron, Mancha Superior, tins lb. 25.00 - —
Safrol, dms. lb. .70 - —
Sage, Dalmatian, bgs. lb. .40 - —
Greek, cns. lb. .16 - —
Italian, cns. lb. .18 - —
Sage oil, clary, bots. lb. 20.00 -30.00
Dalmatian, cns. lb. 3.25 - 3.60
Spanish, cns. lb. 1.25 - 1.75
Sal soda (see Soda sal).
Salicylaldehyde, dms., c.l., t.l., f.o.b. plant, frt. equald lb. 1.23 - —
dms., l.c.l., same basis lb. 1.25 - —
Salicylamide, 100-lb dms lb. 1.05 - —
Salicylic acid, crude, fib. dms., c.l., t.l., frt alld lb. .37¼- —
fib. dms., l.c.l., frt. alld. on 100 lbs. or more lb. .38½- —
Sublimed, tech., fib dms., c.l., t.l. dlvd lb. .39¼- —
fib. dms., l.c.l. dlvd lb. .43½- —
USP, cryst., 200-lb. fib. dms., 1,000 lbs. or more lb. .50½- —
200-lb fib. dms., less than 1,000 lbs lb. .53½- —
Salicylic acid, USP, cryst., 100-lb. fib. dms., 1,000-lbs. or more, lb. .52½- —
100-lb fib. dms., less than 1,000 lbs. lb. .55½- —
USP, powd., 100-lb. fib. dms., 1,000 lbs. or more lb. .57½- —
100-lb. fib dms., less than 1,000 lbs lb. .60½- —
Salol, NF, gran., bbls, kgs lb. 1.20 - —
Powdered salol, 25c per lb higher
Salt, rock, paper bgs., c.l., 100 lbs. 1.09 - —
Salt, table vacuum, common, fine, paper bgs. c.l 100 lbs. 1.34 - —
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis ton 28.00 - —
Saltpeter (see Potassium nitrate)
Sandalwood, E Indian, chips, bgs. lb. .65 - .66
powd. fib dms lb 75 - 76
Sandalwood oil, cns lb. 15.75 -16.50
Sarcosine, tech., tanks, f.o.b., works, frt equald lb. 1.03 - —
Sardine oil, crude, tanks, Pac. coast. lb. No stocks
Sassafras oil, artif., dms. lb. .43 - —
Nat., dom., dms lb. 1.45 - 2.15
Savin oil, USP, cns lb. 4.50 - 5.25
Savory oil, cns lb. 4.75 - —
Schaeffer's salt, paste, dms frt. alld. 100% basis lb. .85 - —
Powd. bgs., frt. alld. 100% basis, lb. .95 - —
Scopolamine hydrobromide, USP, bots oz. 13.00 - —
Sebacic acid, CP, bgs., c.l., works, lb. .69½- —
bgs., l.c.l., works lb. .71½- —
Purified, bgs., c.l., works lb. .65½- —
bgs., l.c.l., works lb. .67½- —
Seidlitz mixture fib dms. 5,000-lb. lots lb. .30½- —
fib. dms. smaller lots lb. .31 - .32
Selenium powd., 99½% dms., dlvd. lb 7.00 - —
Senega root, bls. lb. 3.00 - 3.25
Senna leaves, Alexandria, whole and half, bls lb. .22 - —
siftings lb. .18 - —
Tinnevelly No. 1, bls lb. .22 - —
No. 2, bls. lb. .18 - —
No. 3, bls. lb. .14 - —
pods, bls. lb. .28 - —
powd., bbls., bxs. lb. .17 - —
Serpentaria root, bls. lb. 6.50 - —
Sesame oil, USP, dms. lb .28 - .29
Sesame seed, Colombian, bgs. lb. .15½- —
Lebanese, hulled, bgs. lb. .19 - —
Nicaraguan, hulled, bgs lb. .21½- —
nat., bgs. lb. .14 - —
Salvadorian, nat., bgs lb. .13 - —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .46 - —
bbls., 1,500-lb. lots lb. .47 - —
kgs., 1,500-lb lots lb. 48 - —
Bonedry shellac prices for less than 1,500-lb lots 1c per lb higher for all packages.
Shellac, bleached, refd., bgs., 1,500-lb lots lb. .56 - —
bbls., 1,500-lb. lots lb. .57 - —
kgs., 1,500-lb. lots lb. .58 - —

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U.S.I. CHEMICAL NEWS

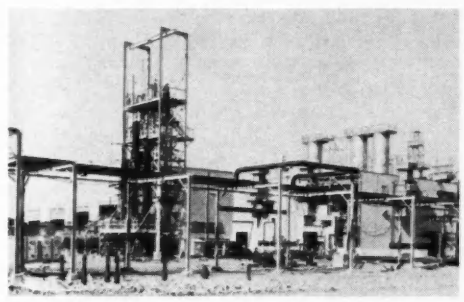
Dec. ★ A Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1959

Polyethylene Expansion To 300 Million Pounds Planned by U.S.I.

U.S.I. has recently announced plans for a new increase in production capacity of PETROTHENE® polyethylene resins at its Houston plant—this time 50 million pounds. This will bring total company capacity to 300 million pounds per year.

The Houston plant, opened just this past March, is already being upped from 75 to 150 million pounds and, with this new expansion, will reach a capacity of 200 million pounds annually. At its other plant in Tuscola, Illinois, the company is producing polyethylene at the yearly rate of 100 million pounds.

The new expansion, expected to be complete by mid-1960, will make U.S.I., with a capacity of 300 million pounds, the second largest polyethylene producer in the world.



Gas producing area at U.S.I.'s Houston plant.

New Inorganic Polymer Has Been Made from Zinc, Chlorine and Ammonia

Researchers have recently reported the development of a new polymer containing only zinc, chlorine and ammonia—which appears to have limited elastomeric properties. The development is significant since plastics and rubber-like materials are made for the most part from organic polymers. In general, inorganic substances do not form polymers, and cannot be produced in rubbery form.

Inorganic polymers are being investigated because many inorganics resist higher temperatures than do organics, and present operating temperatures for many devices are at about the limit that organic polymers can stand. Inorganic polymers might permit raising operating temperature limits.

The new material is called a polymeric monoaminedichlorozinc, and its thermal and hydrolytic stability are said to leave much to be desired. Consequently, the research group plans to make and evaluate a large number of such compounds, in the search for the specific properties of thermal stability and elastomeric nature desired.

The new product is described as an amber-colored, transparent, glassy material at room temperature. It softens on heating and becomes a heavy syrup at about the boiling point of water. When just molten, it can be drawn into fine filaments which are reported to exhibit plasticity and flexibility after cooling. Films of the polymer are said to adhere well to aluminum and glass surfaces.

Complete Details on Sodium-Handling Equipment Presented In New U.S.I. Brochure

Third Edition of Comprehensive Sodium Handling Book Contains Much New Data, Presents Latest Information on All Phases of Handling Technology

The third edition of U.S.I.'s brochure, "Handling Metallic Sodium on a Plant Scale", edited by U.S.I.'s experienced technical service engineers, is just off the press. This brochure has been an authoritative source of information since the first edition was published in 1951, shortly after U.S.I. first opened its sodium plant at Ashtabula, Ohio.

Revised and greatly expanded, the new edition contains the latest information on metallic sodium and its uses, sodium-handling equipment, procedures for handling sodium in the plant, and general safety and first aid measures. The list of references has been brought up-to-date.

Equipment Section Is Comprehensive

The equipment section in particular has been enlarged and is now more than two times its former size. It gives much more detail on construction of pipelines for handling sodium; heating of sodium-carrying lines and valves; insulation, repair and alteration of lines; recommended gaskets, valves and vessels for handling sodium; pumping, transferring, filtering and purifying of the liquid metal; and instrumentation of liquid sodium systems.

In this section, a table has been added giving typical data on induction heating of sodium pipelines. The table on power requirements for electrical resistance heating has

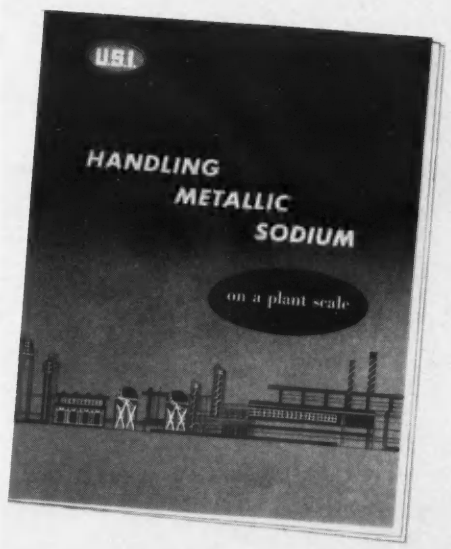
MORE

Research Elders Form Non-Profit Consulting Group

A novel kind of association has been formed under the name Technically Experienced Associates, Mobilized, or "TEAM, Inc." Members are retired research executives of some of the largest industrial companies in the country. They have formed this association to make their wide research experience available "for the benefit of mankind, without entering into competition with commercial consulting organizations or individuals."

"TEAM" members offer their services in these general research and advisory fields: research management, national defense, scientific and technical education, public health, conservation of human and natural resources, and scientific matters of national and international interest.

In keeping with the purposes and objectives of the organization, "TEAM" members offer their services at cost plus a small overhead to cover office expenses. The association says it will welcome as additional members retired research executives from broad fields of professional and scientific activity.



The cover remains the same, but the contents have been updated and greatly expanded in U.S.I.'s new edition of the brochure, "Handling Metallic Sodium on a Plant Scale."

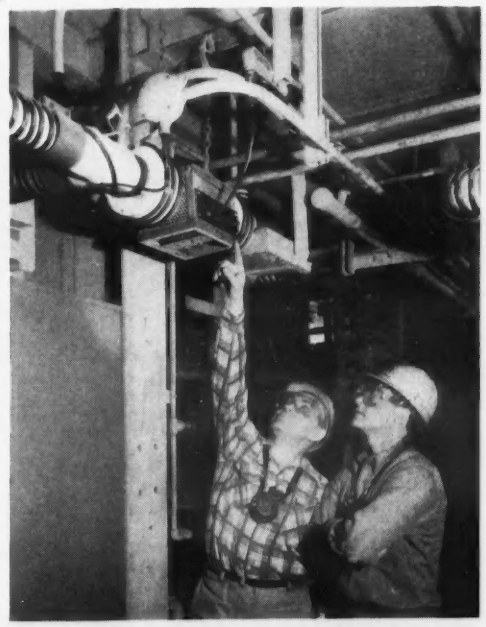


Illustration from U.S.I.'s new sodium-handling brochure shows magnetic flowmeter in sodium line at Mallory-Sharon Metals' zirconium and titanium plant, Ashtabula, Ohio.

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Dec. ★ # U.S.I. CHEMICAL NEWS ★ 1959

CONTINUED

Sodium Book

been completely revised. Also up-dated and enlarged is the table of recommended hardware for piping systems.

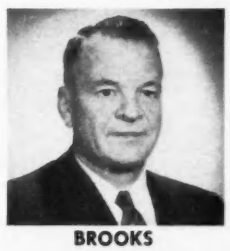
Sources and Safety Stressed

The new edition emphasizes safety measures throughout the book, as well as in a special section devoted to the subject. Throughout the book, also, can be found plentiful mention of sources for equipment, offers of technical assistance on specific problems covered in the text, and many cross-references.

The number of figures illustrating the book —and this includes diagrams and photographs —has been increased by 50%. The additions consist largely of interesting new installation photos. To aid the reader, most diagrams have been enlarged and made more legible.

Copies of the third edition of "Handling Metallic Sodium on a Plant Scale" may be obtained from U.S.I. upon request.

Three New Appointments in U.S.I. Sales Divisions



BROOKS

Albert C. Brooks has been named Manager of the U.S.I. Baltimore Sales Division, succeeding James F. Whitescarver who retired this September. Mr. Brooks has been with U.S.I. for over a quarter century, in plant work, sales, and most recently as Assistant Sales Division Manager in Baltimore.

PARKER

Roy A. Parker has been appointed Kansas City-St. Louis Division Manager for U.S.I. Mr. Parker has been associated with the company for about 33 years and, prior to his new assignment, was Manager of the Kansas City, Mo. Sales Office.

LONGSTRETH

Joseph G. Longstreth has been made Manager of U.S.I.'s St. Louis Sales Office. He has been a sales representative for the company in the St. Louis area since he joined U.S.I. in 1955.

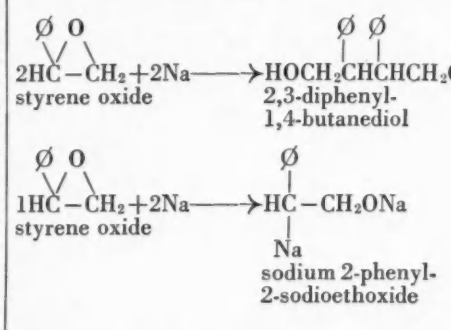
Reactions of Sodium and Compounds Discussed at Organometallic Symposium

At the Organometallic Chemistry Symposium, conducted as part of the 15th Southwest Regional Meeting of the ACS at Baton Rouge, La., on December 3, U.S.I. researchers contributed two papers on organosodium compounds.

In a paper entitled "Reactions of Disodiooctadienes," by Nobis, Robinson, Allgeier and Moormeier, it was indicated that the reaction of these compounds with oxygen or an oxygen-containing material such as an epoxide, aldehyde, ketone or chloromethyl ether, leads to a great variety of long-chain glycols. They are produced in high yield and contain eight to fourteen carbon atoms, depending on the reactant. Straight and branched chain compounds are present and easily separated.

Also covered in the paper was the ability of disodiooctadienes to metalate a variety of olefins and aromatics to yield other organosodium compounds such as allylsodium, butenylsodium, phenylsodium and benzylsodium, along with the mixed octadienes as by-products.

A paper entitled "Reactions of Sodium with Epoxides," by Mador and Robinson, revealed that such reactions result in a cleavage of the oxirane ring. The products are either 1,4-glycols (by dimerization) or a novel type of organosodium alkoxide, depending on the ratio of sodium present. For example:



These reactions are carried out with sodium dispersions in "active" ether solvent media at low temperatures. Other examples and some discussion of mechanism were presented.

Copies of either or both of these papers may be obtained from U.S.I. upon written request on company letterhead.

TECHNICAL DEVELOPMENTS

Information about manufacturers of these items may be obtained by writing U.S.I.

New disposable polyethylene boots for technicians in biological and atomic laboratories, where spreading of contamination is a problem, are now on market. Made of lightweight film, boots give several hours of wear over shoes. **No. 1540**

Treatment of industrial foaming problems with silicones is described in new bulletin. Discusses causes of foaming, control methods, selection of proper defoamer, equipment, techniques for evaluating defoamer effectiveness. **No. 1541**

Expanded zirconium sheet can now be obtained in sheet thicknesses from .020" to .125" into 1/8" to 1 1/2" diamonds, in standard sheet sizes, as unflattened or flattened mesh. Gives resistance against strong or hot phosphoric, hydrochloric, sulfuric acid solutions. **No. 1542**

New fire extinguishing system for small, hard-to-protect areas has been developed. Uses high pressure liquid CO_2 in easily stored cylinders. System can be installed in limited space in warehouses, industrial plants, laboratories. **No. 1543**

Rocket propellants are covered in detail in a new 224-page book now being sold. Contents include composition, production, performance for solid and liquid systems; burning, ignition, igniters; rockets using each type fuel; safety. **No. 1544**

New marking and decorating ink for treated or untreated polyethylene is now available. Said to remain permanently flexible and does not chip when flexed. **No. 1545**

New attachment for two-pan analytical balances designed to convert them into recording instruments that automatically plot weight changes of few tenths of milligram up to 5 grams. Accessory has own electrical damping control. **No. 1546**

Industrial solvents and monohydric alcohols discussed in new book now being sold. Presents physical properties, azeotropic mixtures, manufacturing methods, uses of industrial alcohols. Includes many significant tables and figures. **No. 1547**

Induction heater just introduced operates at 120 mc. believed to be highest frequency ever obtained on commercial machine. Rapidly heats highly resistive conductors. Acts as dielectric heater of nonconductors like polyethylene. **No. 1548**

Chemical marketing problems in the 1960s are forecast in a new book which can now be purchased. The volume consists of a collection of papers presented at the national meeting of the ACS in September, 1959. **No. 1549**

PRODUCTS OF U.S.I.

HEAVY CHEMICALS

Sodium, Metallic: cast solid in tank cars, steel drums, pails; bricks in barrels, pails.
Phosphoric Acid, Fertilizer Grade
Ammonia, Anhydrous: commercial & refrigeration. Tank cars or tank wagons.
Ammonium Nitrate, Nitric Acid, Nitrogen Fertilizer Solutions
Sulfuric Acid: all strengths, 60 Baume to 40% Oleum. Also Electrolytic grade to Federal specifications. Tank cars or tank wagons.
Caustic Soda, Chlorine
Sodium Peroxide

OTHER PRODUCTS

PETROTHENE® Polyethylene Resins

Pharmaceutical Products: DL-Methionine, N-Acetyl-DL-Methionine, Urethan USP, Intermediates.
Alcohols: Ethyl (pure and all denatured formulas); Anhydrous and Regular Proprietary Denatured Alcohol Solvents SOLOX®, FILMEX®, ANSOL® M, ANSOL PR.
Organic Solvents and Intermediates: Normal Butyl Alcohol, Amyl Alcohol, Fusel Oil, Ethyl Acetate, Normal Butyl Acetate, Diethyl Carbonate, DIATOL®, Diethyl Oxalate, Ethyl Ether, Acetone, Acetoacetanilide, Acetoacet-Ortho-Chloranilide, Acetoacet-Ortho-Toluidide, Ethyl Acetoacetate, Ethyl Benzoylacetate, Ethyl Chloroformate, Ethylene, Ethyl Sodium Oxalacetate, Sodium Ethylate, Urethan U.S.P. (Ethyl Carbamate), Riboflavin U.S.P.
Animal Feed Products: DL-Methionine, MOREA® Premix (to authorized mixer-distributors).

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Division of National Distillers and Chemical Corporation
99 Park Avenue, New York 16, N. Y.

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Shellac, orange, lemon No. 1, bgs., 10-bg. lots	lb.	.37	.39
lemon No. 2, bgs., 10-bg. lots	lb.	.34	.37
superfine, bgs., 10-bg. lots	lb	.32	.34
Shellac in 1 to 10-bg. lots 1c. per lb. more.			
Shingle stain oil, tar distillate, dms., c.l., works	gal.	.37	—
dms., l.c.l., works	gal.	.43	—
tanks, works	gal.	.25	—
Sienna pigment, burnt, paper bgs., c.l., works	lb.	.06½-	.18½
paper bgs., l.c.l., works	lb.	.06¾-	.17¾
Raw, paper bgs., c.l., works	lb.	.06¾-	.16¾
paper bgs., l.c.l., works	lb.	.07	.17
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works	ton	25.00	—
bgs., l.c.l., works, ex whse.	ton	45.00	55.00
Hard-quartz, 99½%, 325 mesh., bgs. c.l., works	ton	20.00	—
bgs, l.c.l., works	ton	25.00	—
99½%, 140 mesh, bgs., c.l., works	ton	15.00	—
bgs., l.c.l., works	ton	20.00	—
Silicon tetrachloride, tech., dms., c.l., works	lb.	.18	—
dms., l.c.l., works	lb.	.22	.30½
tanks, works	lb.	.17	—
Silver bullion, ingots, cs	Troy oz.	.91⅜-	—
Silver cyanide bots., 1,000-oz lots,	oz.	.94¾-	—
bots., 500-oz. lots	oz.	.95¼-	—
bots., 100-oz. lots	oz.	.96¼-	—
Silver nitrate, CP., cryst., bots., 3,000-oz. lots	oz.	.67¼-	—
dms., 1,000-oz. lots	oz.	.67¾-	—
bots., 250-500-oz. lots	oz.	.68¾-	—
USP granular silver nitrate 4c. per oz. higher.			
Silver proteinate, mild, USP, bots., dms., 1,000-oz. lots	oz.	1.13	—
Strong, NF, bots., dms., 1,000-oz. lots	oz.	1.10	—
Snakeroot oil, Canada, cns	lb.	40.00	43.00
Soapbark crushed, bls	lb.	.30	.35
Powd., bls.	lb.	.35	.40
Whole, bls.	lb.	.20	.25
Soda ash, dense, 58%, paper bgs., c.l., works	100 lbs.	1.90	—
paper bgs., l.c.l., stock pts.,	100 lbs.	3.00	4.77
bulk, c.l., works	100 lbs.	1.60	—
Light, 58%, paper bgs., c.l., works	100 lbs.	1.85	—
paper bgs., l.c.l., stock pts.	100 lbs.	3.95	4.72
bulk, c.l., works	100 lbs.	1.55	—
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald	100 lbs.	5.20	—
liq. 50% sellers' tanks, works, dry basis	100 lbs.	2.90	—
50%, rayon type, sellers' tanks, works, dry basis	100 lbs.	2.90	3.00
73% sellers' tanks, works, dry basis	100 lbs.	3.00	—
73%, rayon type, sellers' tanks, works, dry basis.	100 lbs.	3.00	3.10
solid, 76%, dms., c.l., works.	100 lbs.	4.80	—
Soda, sal, conc., bgs., c.l., works,.	100 lbs.	2.50	—
bgs., smaller lots, works	100 lbs.	2.80	—
Sodium acetate, anhyd., bgs., c.l., dlvd. E	lb.	.14½-	—
NF, 60%, gran., dms. c.l., works.	lb.	.15½-	—
dms., l.c.l., works	lb.	.17½-	—
Sodium alginate, NF, white powd., dom., 300 lbs. or more	lb.	1.02	—
Sodium p-aminosalicylate, dms., 100-lb. lots or more frt. adjusted	lb.	1.90	—
Sodium antimoniate, bgs., c.l. dlvd. E	lb.	.25½-	—
bgs., l.c.l., dlvd. E	lb.	.27	—
Sodium arsenate, 60% arsenic pentoxide, dealers, dms., ton or more, works	lb.	.26	—
dms. less than ton lots, works	lb.	.26½-	—
Sodium arsenite, 90% pink powder, 75% arsenious oxide, dealers, dms., ton lots or more, works	lb.	.17½-	—
dms., less than ton lots, works	lb.	.18	.19
Sodium ascorbate, dms., 25-50 kilo dms., f.o.b. works	kilo.	10.00	—
10-kilo dm., same basis	kilo.	10.35	—
5-kilo dm., same basis	kilo.	10.75	—
1-kilo bot., same basis	kilo.	11.00	—
Sodium benzoate, tech., dms., c.l., t.l., frt. alld	lb.	.35	—
dms., l.c.l., same basis	lb.	.39	—
USP, dms., c.l., t.l., frt. alld	lb.	.38	—
dms., ton lots, same basis	lb.	.43	—
dms., 1,000-lb lots, same basis.	lb.	.45	—
Sodium bicarbonate, USP, gran., bgs., c.l., works	100 lbs.	2.95	—
bgs., l.c.l., works	100 lbs.	3.85	—
USP, powd., bgs., c.l., works.	100 lbs.	2.55	—
bgs., l.c.l., works	100 lbs.	3.45	—
Sodium bichromate, gran., bgs., c.l. t.l., works	lb.	.13	—
bgs., l.c.l., works	lb.	.13½-	.14¾
Sodium bichromate in dms ¾c. per lb. higher			
Sodium bifluoride bbls. c.l., works, frt. equald	lb.	.19½-	—
bbls., l.c.l., same basis	lb.	.2025-	—
Sodium bisulfate, bulk c.l., works.	100 lbs.	2.00	—
dms., c.l., frt. equald	100 lbs.	3.00	3.60
dms., l.c.l., frt. equald	100 lbs	3.50	4.10
Sodium bisulfite, anhyd., bgs., c.l., works	100 lbs.	5.00	—
bgs., l.c.l., works	100 lbs.	5.45	—
Soln., 35° bbls., c.l., works	100 lbs.	1.70	—
bbls., l.c.l., works	100 lbs	2.20	—
Sodium borate (see Borax)			
Sodium borohydride, powd., dms., l.c.l., works	lb.	33.00	40.00
dms., c.l., works	lb.	19.90	—
Sodium borohydride, stabilized water soln., 12% NaBH,, 100% basis, dms., works	lb.	15.00	—
Pelletized sodium borohydride $1 per lb higher in 1,000-lb lots.			
Sodium bromide USP, gran., dms., works	lb.	.40	—
Sodium carbonate, cryst., monohydrated (see Soda, sal)			
Sodium carbonate, monohydrated, bgs., c.l., works	100 lbs.	3.10	—
bgs., l.c.l., works	100 lbs.	3.50	—
Sodium carboxymethyl cellulose (see CMC).			
Sodium chlorate, cryst., 350-lb. dms., c.l., works	lb.	.09	—
dms., l.c.l., works	lb	.09½-	.10½
Sodium chlorate in 100-lb dms., only, ¼c. per lb higher			
Sodium chloride, tech. (see Salt).			
Sodium chloride, USP, gran., bgs.	lb	.05	—
Sodium chlorite, tech., dms., c.l., works	lb.	.58	—
dms., 20-dm lots or more works.	lb.	.66	—
dms. smaller lots, works	lb.	.70	.73
Sodium chloroacetate, tech., dms., c.l., works	lb.	.27	—
dms. l.c.l. works	lb	.28	—
Sodium chromate, anhyd. fib. dms., c.l., t.l., works	lb	.14¾-	—
fib dms., l.c.l., works	lb.	.15¼-	.16½
Sodium chromate, tetrahydrate, bgs., c.l., t.l., works	lb.	.1015-	—
bgs., l.c.l.	lb.	.1065-	.1190
Sodium citrate, anhyd. 200-lb. dm., f.o.b. works E	lb.	.62	—
NF VIII, gran., bgs., c.l., same basis	lb.	.26	—
USP XIV, gran., bgs. c.l., same basis	lb.	.29	—
Sodium citrate, USP powd prices ½c. higher.			
Sodium cyanate, dms., 1,000-lb. lots, works	lb.	.85	—
dms., smaller lots, works	lb.	.90	1.10
Sodium cyanide, flake, 96-98%, dms., c.l. or 20,000-lb. lots	lb.	.193	—
dms., over 1,000-lb lots	lb.	.203	—
dms., 100-lb to 1,000-lb lots	lb.	.213	—
Gran. sodium cyanide 1c higher.			
Sodium cyclamate, 100-lb dm., f.o.b. works	lb.	1.95	—
Sodium diacetate anhyd., 39-41% acetic acid, dms., c.l., works	lb.	.18	—
250-lb dms., l.c.l. works	lb.	.18¾-	—
Tech., 33-35% acetic acid, dms., l.c.l., works	lb.	.15	—
250-lb. dms., l.c.l., works	lb.	.15¼-	—
Sodium dimethyl dithiocarbamate, 40% soln. dms. c.l., t.l., frt. alld., 100% basis	lb.	.42	—
dms., l.c.l., t.t.l., same basis	lb.	.47	.52
tanks, same basis	lb.	.38	—
Sodium ferrocyanide, bgs., 10-ton lots	lb.	.13½-	—
bgs., smaller lots	lb.	.14¾-	—
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald	lb.	.1390-	—
fib. dms., l.c.l., works, frt equald	lb.	.1465-	—
Sodium formate, bgs., c.l. works	100 lbs	7.05	—
bgs., l.c.l., ex whse.	100 lbs	8.65	—
Sodium gentisate, 100-lb fib dms.	lb	5.50	—
Sodium gluconate, refd., 250-lb. dm., f.o.b. works E	lb.	.84	—
Tech., bgs., c.l., t.l., same basis	lb.	.34	—
Sodium hydride, 50% soln. in oil, dms., works	lb.	1.25	2.50
25% soln. in oil, dms., 50 lbs or less, f.o.b shipping point	lb.	2.20	—
dms., 50-99 lbs., same basis	lb.	1.77	—
dms., 100-999 lbs., same basis.	lb.	1.20	—
dms., 1,000 lbs. or more, same basis	lb.	.95	—
Sodium hydrosulfide (see Sodium sulfhydrate).			
Sodium hydrosulfite dms. c.l., frt. alld	lb.	.22½-	—
dms. l.c.l., frt. alld.	lb.	.24¾-	—
Sodium hydroxide, NF pellets 100-lb. dms., 1 to 100-dm lots.	lb.	.23½-	.28
Sodium hydroxide, tech (see Soda, caustic).			
Sodium hypophosphite, NF, dms., 1,000-lb lots	lb.	.97	—
Sodium hyposulfite (see Sodium thiosulfate).			
Sodium iodide, USP, 300-lb. dm., f.o.b. works	lb.	1.98	—
Sodium lauryl sulfate, dms., c.l., dlvd	lb.	.20½-	—
dms., t.t.l., dlvd	lb.	.21½-	—
tanks, dlvd.	lb.	.19½-	—
Sodium lignin sulfonate, bgs., c.l., works	100 lbs	4.25	6.50
l.c.l., bgs., works	100 lbs	4.40	7.00
Sodium metabisulfite (see Sodium bisulfite).			
Sodium metaborate octahydrate gran., bgs., c.l., works	ton	210.00	—
bgs., ton lots, ex whse	100 lbs.	8.00	—
bgs., smaller lots, ex whse.	100 lbs	9.25	11.25
Tetrahydrate, bgs., c.l., works	ton	210	—
bgs., ton lots, ex whse	100 lbs.	13.93	—
bgs., smaller lots, ex whse.	100 lbs.	15.18	17.18
Sodium, metallic bricks, c.l works.	lb.	.21	—
Fused, 18,000-lb lots or more, works	lb.	.19¼-	—
tanks, works	lb.	.17	—
Sodium metalinate bbls. frt. alld.	lb.	.62	—
Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt	100 lbs.	11.10	—
bgs., l.c.l., same basis	100 lbs.	11.85	—
dms., c.l., same basis	100 lbs.	11.70	—
dms., l.c.l., same basis	100 lbs.	12.45	—
Sodium metasilicate anhyd., bgs., c.l., works	100 lbs	5.70	—
bgs. 6,000-19,900 lb lots works	100 lbs	6.05	—
dms., c.l., works	100 lbs	6.20	—
dms., l.c.l., works	100 lbs	6.55	—
Sodium metasilicate pentahydrate, bgs. c.l., works	100 lbs	4.45	—
bgs. l.c.l. works	100 lbs	4.80	6.75
dms., c.l., works	100 lbs	4.95	—
dms., l.c.l. works	100 lbs	5.30	7.25
Sodium molybdate anhyd., dms., works, frt equald	lb.	.92	.99
Cryst., dms., works, frt. alld	lb.	.74	.76

What Blockson Service Means

In Texas, New England, beyond the Rockies... you'll find Blockson customers within a stone's throw from some local phosphate source. Ask any of them why they favor Blockson and you get pretty much the same answer.

"Blockson ships us the phosphates when we want them."

A typical phone call to Blockson shows you what they mean:

An East Coast buyer phones collect to order a mixed car of phosphates, and includes Sodium Silicofluoride and Sodium Fluoride in the car.

"How soon can I get that car?"

"Hold the phone...We'll move the car for you tomorrow — usual routing. We'll wire the car number and trace it... You can look for it Thursday."

This is ordinary routine at Blockson, but it is extraordinary in two important particulars.

FIRST: *At our end, the entire sales, service and traffic operation was handled on the buyer's first and only phone call. There was no cross correspondence, no branch-to-home-office time lag.*

SECOND: *The buyer talked only to one man. This man has the job of taking the red tape out of sales, service and shipping.*

Incidentally, if the buyer had phoned to change, add to, or re-route his order, he would get the same spot service.

Such routine promptness in speeding your chemicals to you is almost without parallel in a company that does so large a volume as Blockson. That's because we use organization to clear the decks instead of cluttering them.

We can put this organization to work for you. Try us.

BLOCKSON IS A MAJOR PRODUCER OF:

- Sodium Tripolyphosphate
- Tetrasodium Pyrophosphate
- Trisodium Phosphate Crystalline • Monohydrate
- Trisodium Phosphate Chlorinated
- Disodium Phosphate Crystalline • Anhydrous
- Monosodium Phosphate Anhydrous • Monohydrate
- Sodium Polyphos*
- Sodium Acid Pyrophosphate
- Tetrapotassium Pyrophosphate
- Sodium Fluoride
- Sodium Silicofluoride
- Hygrade Fertilizer
- C-29 Sequestering Agent
- Teox 120 (Nonionic Surfactant)
- Hydrofluoric Acid
- Sulfuric Acid

*Sodium Hexametaphosphate—Sodium Tetraphosphate

OLIN MATHIESON CHEMICAL CORPORATION — BLOCKSON

BLOCKSON CHEMICAL COMPANY • Joliet, Ill.
Division of Olin Mathieson Chemical Corporation

WAREHOUSE STOCKS AT ALL BLOCKSON DISTRIBUTORS

Sodium Monoglutamate—Sorbitol

Sodium monoglutamate (see Monosodium glutamate).
Sodium monohydrate (see Sodium carbonate, monohydrated).
Sodium naphthionate, bbls. lb 70 - —
Sodium nitrate, dom., crude, bgs., c.l. works ton 48.00 - —
bulk, c.l., works ton 44.00 - —
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac. whse ton 48.00 - —
bulk, c.l., same basis ton 44.00 - —
Sodium nitrite, USP, bbls., c.l., works, frt equald 100 lbs 9.00 - —
bbls., l.c.l., same basis 100 lbs 11.00 - —
Sodium orthosilicate, conc., dms., c.l., works 100 lbs. 6.70 - —
dms., l.c.l., works 100 lbs. 7.05 - 7.65
Hydrated, flake, bbls., c.l., works, 100 lbs 5.65 - —
bbls, l.c.l., works 100 lbs 7.60 - 7.90
Sodium oxalate, 99%, bgs., works, 100 lbs. 12.35 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate).
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, briquets, dms., c.l. works, frt. equald lb. .26 - —
dms., l.c.l., same basis lb. .27½ - .34
Pellets, dms., c.l., same basis lb. .26 - —
dms., c.l., same basis lb. .27½ - .34
Powd., dms., c.l., same basis lb. .25 - —
dms., l.c.l., same basis lb. .26½ - .33

Sodium pentobarbital, USP, dms., 100 lbs. or more lb. 6.00 - —
Sodium perborate, NF, tech., bgs., c.l., works lb. .18½ - —
bgs., l.c.l., works lb. .19 - .21
Sodium peroxide, dms., c.l., t.l., dlvd. E. of Miss lb. .21½ - —
dms, l.c.l., same basis lb. .22 - .22½
Sodium phenobarbital, USP, 100-lb dms lb 3.75 - —
Sodium phenosulfonate, USP IX, gran., dms lb. .52 - .53
NF, powd., dms lb. .55 - .56
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt. equald, 100 lbs. 7.95 - —
bgs. l.c.l. same basis 100 lbs. 8.35 - 9.40
Dibasic, duohydrate, bgs., c.l., frt. equald. 100 lbs. 7.60 - —
bgs. l.c.l. same basis 100 lbs 8.10 - —
USP, dried, powd., bgs., dms., works lb. .19 - .20½
Monobasic, anhyd., bgs., c.l., frt. equald. 100 lbs. 9.00 - —
bgs., l.c.l. same basis 100 lbs 9.40 - 10.00
Tribasic, anhyd., bgs., c.l., frt. equald. 100 lbs. 9.00 - —
bgs., l.c.l. frt. equald 100 lbs 9.45 - 10.05
cryst., bgs., c.l., t.l. frt equald 100 lbs 4.60 - —
bgs. l.c.l. frt equald 100 lbs 5.00 - 5.75
Sodium phosphate tn dms 60c to 80c higher than bgs
Sodium picramate, tech paste, dms., f.o.b., works, frt. equald lb. .90 - —

Sodium prussiate, yellow (see Sodium (ferrocyanide).
Sodium pyrophosphate acid, bgs., c.l., works, frt. equald, 100 lbs. 11.10 - —
bgs., l.c.l., same basis 100 lbs. 11.85 - 12.35
Sodium pyrophosphate, ferric, dms., c.l., t.l., works lb. .36 - —
dms., l.c.l., works lb. .37 - .39
Sodium pyrophosphate tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs 7.81 - —
bgs., l.c.l. same basis 100 lbs 9.21 - 9.71
Sodium salicylate, USP dms., 1,000-lbs. or more lb. .78½ - —
dms. less than 1,000 lbs dms lb. .81½ - —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs. 2.35 - —
bgs., l.c.l., dlvd. zone 1 100 lbs. 4.10 - 4.35
dlvd. zone 2 100 lbs 4.35 - 4.60
dlvd. zone 3 100 lbs. 4.75 - 4.90
dlvd zone 4 100 lbs. 5.35 - 5.60

Sales zones are: (1) Atl. states E. of Miss., R and N of south bound of Ky. and Va., Ala., La., and Miss., south of 31°; Tex E. of 100°; S. of 31° Fla.; also Me., N. H. and Vt. in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport) Minn. Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No of 31°; (3) Ark. W. of 96°, Kan., Neb W. of 98° N. D., Okla., S. D., Tex., W of 100° (including Wichita Falls excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.

Sodium sesquisilicate, anhyd., bgs., c.l., t.l., works 100 lbs. 5.70 - —
dms., c.l., t.l., works 100 lbs. 6.20 - —

Sodium sesquisilicate, hydrated, bgs., c.l., works 100 lbs. 5.00 - —
bgs., 6,000-19,900 lb. lots, works, 100 lbs 5.35 - —
dms., c.l., works 100 lbs 5.50 - —
dms., 6,000-19,900 lb. lots, works, 100 lbs. 5.85 - —
Sodium silicate, liq., 40° Be. 1:3.2, turbid, dms., c.l., works 100 lbs. 1.65 - —
dms., l.c.l., works 100 lbs 1.90 - 2.40
tanks, works 100 lbs 1.20 - —
47° Be., 1:29.9, turbid, dms., c.l., works 100 lbs. 2.25 - —
dms., l.c.l., works 100 lbs 2.60 - 3.45
tanks, works 100 lbs 1.90 - —
Sodium silicate, liq., 52° Be., 1:2.4, turbid, dms., c.l., works 100 lbs. 2.65 - —
dms., l.c.l., works 100 lbs 3.00 - 3.50
tanks, works 100 lbs 2.30 - —
Solid, 1:3.2, bgs., works ton 67.50 - —
Sodium silicofluoride, bgs., c.l., works lb. .065 - —
bgs., l.c.l., works lb. .725 - —
Sodium silicofluoride in dms. 0.4c. per lb. higher.
Sodium stannate, dms., works, frt. alld. E lb. .633 - .692
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls., works lb. .22 - —
Sodium sulfate, NF VII, dried, powd., dms lb. .22½ - —
Tech., anhyd., bgs., c.l., dlvd. E, works ton 54.00 - —
Tech., detergent, rayon grade, bgs., c.l., works ton 36.00 - —
bulk, c.l., works ton 32.00 - —
USP, cryst., fib. dms. lb .17½ - .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works frt equald, lb. .07¼ - —
dms., l.c.l., same basis lb. .08¼ - —
Liq., 40-44%, tanks, works, 100% basis ton 130.00 - —
Sodium sulfide, flake, dms., c.l., works, E., frt equald lb. .06 - —
dms., l.c.l., same basis lb. .07 - —
Fused, bbls., c.l., works, E., frt. equald lb. .05½ - —
bbls., l.c.l., same basis lb. .06½ - —
Sodium sulfite, anhyd., bgs., c.l. works 100 lbs 7.55 - —
bgs., l.c.l., same basis 100 lbs 7.95 - —
Tech., bgs., c.l., works 100 lbs. 3.00 - —
bgs., t.l., same basis 100 lbs 4.00 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax)
Sodium tetrasulfide, liq., 40% dms., c.l., works, frt equald lb. .04½ - —
dms., l.c.l., same basis lb. .05½ - —
Sodium thiocyanate, CP, dms lb. .55 - .65
Tech., anhyd., dms., 1 ton lots or more, works lb. .317 - —
dms., less than ton lots, works lb. .337 - —
Sodium thiosulfate, NF, cryst. bbls. lb. .13½ - —
Tech., anhyd., 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 7.75 - —
100-lb. bgs., l.c.l., l.t.l., frt. equald 100 lbs. 8.15 - —
Tech., anhyd., photo grade, 64-lb. bgs., c.l., t.l., frt. equald, lb. .0775 - —
64-lb. bgs., l.c.l., l.t.l., frt. equald lb. .0815 - —
Tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 4.95 - —
100-lb. bgs., l.c.l., l.t.l., frt. equald 100 lbs. 5.20 - —
Sodium titanate, ctns., c.l., works, lb. .14¼ - —
ctns., 5-ton lots, works lb. .14½ - —
ctns., 1-ton or less, works lb. .14¾ - —
Sodium trichloroacetate, 94%, 100-lb. dms., c.l., frt alld E, lb. .35 - —
50-lb. dms., c.l., frt. alld. E lb. .35½ - —
10-lb cns., c.l., frt alld E lb. .42 - —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt equald 100 lbs. 8.16 - —
bgs., l.c.l., same basis 100 lbs 8.56 - 9.06
Sodium trisilicate, powd., 1:3.2 bgs., c.l., works 100 lbs 8.95 - —
bgs., l.c.l., works 100 lbs 9.70 - 13.13
dms., c.l., works 100 lbs 9.45 - —
dms., l.c.l., works 100 lbs. 10.20 - 10.60
Sodium tungstate, tech. kgs dlvd. E lb. 1.09 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 - —
dms., l.c.l., same basis lb. .21½ - —
Sodium-zirconyl sulfate, fib. dms., 1,000-lb. lots or more works lb. .28 - —
fib., dms., smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt. equald gal. .30 - .35¼
Solvent naphtha, petroleum, straight aromatic, 310°F-360°F b.r., 14°-16°C m.a.p., tankcars, New Jersey and New York gal. .31 - —
Houston, Texas gal. .29 - —
355°F-420°F b.r., 17°-18°C. m.a.p., tankcars, New Jersey and New York gal. .32 - —
Houston, Texas gal. .30 - —
Solvent naphtha, petroleum, partial aromatic, 211°F-265°F b.r., 31°C. m.a.p., tankcars New Jersey and New York gal. .235 - —
286°F-340°F b.r., 22°C m.a.p., tankcars New Jersey and New York gal. .275 - —
319°F-380°F b.r., 27°C m.a.p., tankcars, New Jersey and New York gal. .285 - —
322°F-395°F b.r., 28°C. m.a.p., tankcars, New Jersey and New York gal. .295 - —
Sorbitan monostearate, fib. dms., 20,000-lb. lots, works lb. .33 - —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .35 - —
fib. dms., smaller lots, works lb. .38 - .40
Sorbitan tristearate, fib dms., 20,000-lb. lots, works lb. .34 - —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .36 - —
fib. dms., smaller lots, works lb. .39 - .41
Sorbitol, NF, reg., 70% aqueous, dms., c.l., works lb. .18 - —
dms., l.c.l., works lb. .19 - —
tanks, works lb. .16¼ - —
Resin grade, cryst., pellets, dms., c.l., works lb. .23 - —
dms., 1 to 5-ton lots, works, lb. .25 - .26
Powd., dms., c.l., works lb. .36 - —
dms., 1 to 5-ton lots, works, lb. .38 - .39
Sorbitol, soln., coml., aqueous, dms., c.l., works lb. .24¼ - —
dms., ton lots, works lb. .25 - —
dms., smaller lots, works lb. .25¼ - —
tanks, works lb. .23¼ - —

ASK STAUFFER FOR MINERAL ACIDS AND TECHNICAL SERVICE

SULFURIC ACID

Commercial Grades of 77.67 to 100% H_2SO_4. "Special Grade" concentrations of 93 to 100% H_2SO_4 with iron guaranteed less than 50 ppm and similarly low content of nitrogen, arsenic and other impurities. Electrolyte Quality at Sp.Gr. 1.300, 1.360, 1.400, 1.500 and 1.835. Oleum in all concentrations from 15% free SO_3 to 100% Liquid SO_3 (equivalent to 103.38 to 122.5% H_2SO_4). Spent sulfuric acids from the manufacture of lube oil, naphtha, DDT, benzene, alkylation, alcohol, white oils, detergent and other chemicals, or from other manufacturing operations, are regenerated in the world's largest facilities and delivered as water-white 98% H_2SO_4 on an established contract basis. Stauffer processing and contract arrangements eliminate waste, eliminate air and stream pollution or the alternative of in-plant conversion of process residues.

MURIATIC ACID

Delivered in standard strengths of 18°, 20° and 22° Bé corresponding to 27.92, 31.45 and 35.21% HCl. Stauffer also offers an extremely high-purity, high-analysis grade of muriatic acid for food and other special uses. All grades are available in tank cars, tank trucks and carboys. Send for brochure on HCl; 44 pages with many graphs and tables.

NITRIC ACID

Commercial Grades of 38°, 40° and 42° Bé corresponding to 56.52, 61.38 and 67.18% HNO_3. Engravers' quality of the same concentrations is conditioned to prevent fuming and discoloration of etching plates.

HYDROFLUORIC ACID

Anhydrous, is shipped in 22-ton and 42-ton tank cars, and in 100- and 200-pound cylinders. Send for brochure on HF; 16 pages plus 24-page pocket-size manual on handling, safety and analysis.

H_2SO_4 delivered from LeMoyne, Ala., Los Angeles and Richmond, Cal., Hammond, Ind., Baton Rouge, La., Baytown, Corpus Christi, Fort Worth and Houston, Tex., and Tacoma, Wash.

HCl delivered from Los Angeles, Richmond and San Francisco, Cal., Louisville, Ky., Baton Rouge, La., Henderson, Nev., No. Portland, Ore., Fort Worth and Houston, Tex. and Tacoma, Wash.

HNO_3 delivered from Los Angeles and San Francisco, Cal., No. Portland, Ore., Fort Worth and Houston, Tex.

Anhydrous HF delivered from Houston, Tex.; Aqueous from Louisville, Ky.

Stauffer technical experts are broadly experienced in the manufacture, handling and uses of Mineral Acids. Call on us if we can help you with technical assistance.

Stauffer CHEMICALS SINCE 1885

STAUFFER CHEMICAL COMPANY

380 Madison Avenue, New York 17, New York

Prudential Plaza, Chicago 1, Illinois — 636 California Street, San Francisco 8, California
824 Wilshire Boulevard, Los Angeles 17, California — P. O. Box 9716, Houston 15, Texas

Soya protein, chemically isolated, old process, bgs., c.l., works	lb.	.23	—
bgs., l.c.l., works	lb.	.23¼	.23½
Chemically isolated, new process, bgs., c.l., works	lb.	.20	—
bgs., l.c.l., works	lb.	.20¼	.20½
Soybean meal, 44%, bulk, unrestricted, Decatur	ton.	59.00	—
Soybean oil, crude, tanks, Decatur	lb.	.07⅞	—
Foots, soapstock, acid 95%, tanks, N. Y.	lb.	.04⅞	—
Refd., alkali, dms.	lb.	.1218	.1243
tanks	lb.	.1018	—
clarified, dms.	lb.	.1168	.1193
tanks	lb.	.0968	—
salad, dms.	lb.	.1200	.1225
tanks	lb.	.1000	—
Soybean oil acids, dbl. dist., dms.	lb.	.18	.20½
tanks	lb.	.15½	—
S. D., dms	lb.	.16¾	.19¼
tanks	lb.	.14¼	—
Sparteine sulfate, cns.	oz.	.80	—
Spearmint leaves, dom., bls.	lb	.75	—
Spearmint oil, NF, dms	lb.	9.00	-11.25
Sperm oil, bleached, winter, 45° dms	lb.	.1375	.1475
tanks	lb.	.1175	—
Nat., winter, 45°, dms	lb.	.1275	.1375
tanks	lb.	.1075	—
Spermaceti wax, blocks, cs	lb.	.31	.33
Cakes, cs.		.32	.34
Spruce oil cns., dms.	lb	2.10	3.55
Squill, white, bls	lb.	.16	.18
powd., bbls., bxs	lb.	.17	.20
St. John's bread, edible, bls.	lb.	.17	—
Stannic chloride, anhyd., dms., works	lb.	.803	.825
Stannic oxide, dms., dlvd.	lb.	1.06	1.07
Stannous chloride, anhyd. dms., works	lb.	.995	1.250
Hydrous, cryst., dms., works	lb.	.86	.87
Stannous sulfate, dms., works	lb.	1.05	1.07
Star root (see Helonias root).			
Stargrass root (see Aletris root).			
Stavesacre seed, bgs	lb.	.60	.61
Stearic acid, dbl., pressed bgs.	lb.	.16¼	.18¾
Single-pressed bgs.	lb.	.15¾	.18¼
Triple-pressed, bgs.	lb.	.18	.20½
Stearine, oleo (see Oleostearine).			
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York	gal.	.18	—
tanks, western Pennsylvania,	gal.	.16	—
tanks, group 3	gal.	.13375	—
tankwagon, Boston	gal.	.20	—
Chicago	gal.	.299	—
Cleveland	gal.	.23½	—
Los Angeles, ex tax	gal.	.199	—
Newark	gal.	.19	—
New York	gal.	.19	—
Philadelphia	gal.	.19½	—
Pittsburgh	gal.	.19	—
Stramonium leaves, bgs	lb.	.15	—
Streptomycin hydrochloride, bulk,	gram.	.04	.041
Streptomycin sulfate, bulk	gram.	.04	.041
Strontium bromide, NF, cryst., 100-lb. dm., f.o.b. E	lb.	.92	—
Strontium carbonate, pure, dms., 5-ton lots or more, works	lb.	.35	—
dms., 1-ton lots, works	lb.	.37	—
Tech., dms., works	lb.	.19	—
Strontium chromate fib. dms., dlvd.	lb.	.48	—
Strontium iodide, jars, 25-lb. lots.	lb	3.57	—
Strontium nitrate, bgs., c.l., works.	100 lbs.	11.00	—
bgs., l.c.l., works	100 lbs.	12.00	—
Strontium salicylate, NF, dms.	lb	1.88	—
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works	ton.	56.70	-66.15
Strophanthin G (see Ouabain, USP).			
Strophanthin K, bots.	oz.	25.00	-25.50
Strophanthus seed, Kombi, biologically tested, bgs	lb	3.50	3.75
Styrax gum, USP cs	lb.	4.50	5.50
Styrene monomer, polymer grade, 99.6% dms. c.l. frt alld.	lb.	.17	—
dms., l.c.l., same basis	lb.	.19	—
tanks, same basis	lb.	.14½	—
Tech., 99.2%, dms., c.l.	lb.	.1458	—
dms., l.c.l., same basis	lb.	.1658	—
tanks, bulk, same basis	lb.	.1208	—
Above prices are escalated for each calendar quarter on the basis of cost of crude oil at the well, cost of petroleum refining labor, and prices in the three major sections of the Wholesale Commodity Price Index.			
Styrolyl acetate, bots.	lb.	1.25	1.45
Succinic acid, purif., cryst., bbls., works	lb.	.62	.75
Sucrose, refd., white, bgs., refy	E. lb.	.0955	—
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs., l.c.l. works	lb.	1.00	—
Sugar (see Sucrose)			
Sugar cane wax, dom., refd., slabs, 80-lb. ctns. works	lb.	.60	.65
80-lb. ctns., spot	lb.	.65	.75
Sulfabenzamide dms.	kilo	8.80	9.90
Sulfabenzamide-sodium dms.	kilo	9.00	10.10
Sulfacetamide, USP, fib dms.	kilo.	6.61	6.83
Sulfacetamide-sodium, USP, fib. dms	kilo	8.15	9.25
Sulfadiazine, USP, microcrystals, dms	kilo.	23.35	-24.45
USP, powd., dms.	kilo.	22.60	-23.70
Sulfadiazine-sodium, USP, dms	kilo.	24.80	25.90
Sulfaguanidine, NF X, dms	kilo	5.50	6.60
dms	kilo.	23.50	-24.60
Sulfamerazine-sodium, USP, powd., dms	kilo.	24.80	-25.90
Sulfamethazine, USP XV, microcrystals, dms	kilo.	19.65	-20.75
USP XV, powd., dms	kilo.	18.75	-19.85
Sulfamic acid, cryst., dms., c.l., t.l., works	100 lbs.	16.00	—
dms, l.c.l., t.l., works	100 lbs.	17.50	-18.50
Gran., dms, c.l., t.l., works	100 lbs.	14.75	—
dms., l.c.l., t.l., works	100 lbs.	16.25	-17.25
Sulfanilamide, NF X, 30-80 mesh, dms	kilo	3.05	3.50
NF X, microcrystals, dms.	kilo	3.79	4.20
NF X, powd., dms.	kilo	2.85	3.30
Sulfanilamide quinoxaline, veterinary dms	kilo.	16.28	—
Sulfanilic acid, tech., dms, c.l., frt, alld	lb.	.21	—
dms, l.c.l. frt alld	lb.	.23	—
Sulfapyridine USP XV powd. bots, tins	kilo.	15.45	-16.55
Sulfapyridine-sodium monohydrate, dms	kilo	16.55	-17.65
Sulfathiazole, NF X, microcrystals, dms	kilo	6.25	6.60
NF X, powd., dms.	kilo.	5.50	5.85
Sulfathiazole-sodium, NF X, dms, 1,000 lb lots or more	lb	2.35	—
Sulfur, coml., flour, bgs., mines	100 lbs.	2.35	—
bbls, mines	100 lbs.	3.30	—
lump, bgs., mines	100 lbs.	2.25	—
bbls, mines	100 lbs.	2.80	—
Sulfur, crude, dom., bright, bulk, f.o.b. cars, mines	long ton.	23.50	—
Sulfur, crude, export, f.o.b. vessels, Gulf ports,	long-ton.	25.00	—
US and Canada f.o.b vessels Gulf ports	long-ton.	25.00	—
Domestic dark sulfur prices are $1 per long-ton lower			
Sulfur, crude, imp., bulk, Mexican, filtered, f.o.b., vessel, Coatzacoalcos	long-ton.	24.00	—
Mexican dark sulfur price is $1 per long-ton lower			
Sulfur, refd., flowers, NF, bgs., mines	100 lbs.	5.65	—
bbls., mines	100 lbs.	7.00	—
flour, light, bgs., mines	100 lbs.	5.25	—
bbls., mines	100 lbs.	6.25	—
lump, bgs., mines	100 lbs.	4.95	—
rolls, bgs., mines	100 lbs.	5.50	—
bbls., mines	100 lbs.	6.25	—
salt block, bgs., mines	100 lbs.	4.65	—
virgin block, bbls, mines	100 lbs.	4.70	—
Sulfur, rubbermakers, coml., reg., bgs., mines	100 lbs	2.45	—
bbls, mines	100 lbs.	3.70	—
98-100%, passing through 325 mesh bgs, mines	100 lbs	2.55	—
bbls., mines	100 lbs.	3.80	—
refd., bgs., mines	100 lbs.	4.90	—
bbls., mines	100 lbs.	6.05	—
treated, 2.5% mineral oil, bgs., mines	100 lbs	2.75	—
bbls., mines	100 lbs.	4.00	—
Sulfur dichloride, ret, dms, c.l., works frt equald	lb	04½	—
ret, dms., l.c.l., same basis	lb.	05¼	—
tanks same basis	lb	04	—
Sulfur dioxide, liq., coml., cyls., works, frt equald	lb.	.10	.12
multi-unit cars, works	lb	.0535	—
tanks, works	lb.	.045	—
Sulfur dioxide, refrigeration, cyls., dlvd	lb.	.33	—
Sulfur monochloride 55-gal non-ret, dms., c.l., frt equald	lb.	04½	—
dms., l.c.l., same basis	lb	05¼	—
tanks, same basis	lb	.04	—
Sulfuric acid, 60° Be, cbys., c.l., works	100 lbs	2.00	—
cbys., l.c.l., works	100 lbs	2.30	—
tanks, works	ton	18.60	—
66° Be, cbys, c.l., works	100 lbs	2.25	—
cbys., l.c.l., works	100 lbs	2.55	3.35
tanks, works	ton.	22.35	—
Sulfuric acid, 98%, tanks, works.	ton	23.50	—
99%, tanks, works	ton.	23.70	—
100%, tanks, works	ton.	23.95	—
CP, NF, consumers' cbys., c.l., frt. equald	lb.	.12¾	—
consumers' cbys., l.c.l., same basis	lb.	.14¼	.14¾
5-pt bots, extra cs., c.l. works, frt alld	lb	16¼	—
5-pt bots, extra cs, l.c.l. same basis	lb	17¾	.18¾
Sulfuric acid fuming (oleum) 20% tanks, works	ton.	25.00	—
40%, tanks, works	ton	29.00	—
65%, tanks, works	ton	39.50	—
Superphosphate run-of-pile, under 22% a.p.a., pulv., bulk., c.l., Baltimore	unit-ton	.90	.93
bulk, c.l., Carteret, N. J.	unit-ton.	.90	.93
bulk, f.o.b., vessel	unit-ton	1.02	—
Superphosphate triple 48% or more a.p.a., pulv., bulk c.l. East Tampa Fla	unit-ton	98	—
Sweet birch oil, USP, northern, cns	lb	4.00	9.50
USP, southern, cns	lb	2.00	3.05

T

2,4,5-T dms, c.l. works frt equald	lb	1.18	—
dms, l.c.l. same basis	lb	1.25	—
2,4,5-T isopropyl ester, dms., c.l. works frt equald	lb	1.24	—
dms, l.c.l. works	lb	1.29	—
Talc dom fibrous New York grd bgs c.l works	ton	28.00	—
bgs, l.c.l., works	ton.	31.00	-36.00
fibrous, New York 99.5% 325 mesh bgs c.l. works	ton	31.00	—
bgs l.c.l., works	ton	34.00	—
fibrous, 99.95%, 400 mesh micronized bgs, c.l. works	ton.	38.00	—
625 mesh micronized, bgs. c.l. works	ton.	80.00	—
ord., Calif., gran., bgs., c.l. works	ton	34.00	-39.50
Vermont, off-color grd., bgs., c.l., works	ton	19.40	—
bgs., l.c.l. works	ton.	37.00	—
Imp., Canadian grd bgs., c.l. mines	ton	20.00	-35.00

The severe, ill-fitting "envelope" bathing cap of former days is outmoded. Imaginative styling has taken over, to create a crown of beauty out of new polymers.

Beauty—in and out of the swim

To achieve the cooling whites and becoming pastels the designer wants, compounders choose TITANOX® white titanium dioxide pigments. TITANOX-RA in particular has really put white and tinted stocks in the swim.

There's rutile or anatase titanium dioxide white pigment in the TITANOX line for any rubber or plastic composition. Our Technical Service Department will be happy to help you select the proper one. Titanium Pigment Corporation, 111 Broadway, New York 6, N. Y.; offices and warehouses in principal cities. In Canada: Canadian Titanium Pigments Limited, Montreal.

TITANIUM PIGMENT CORPORATION
SUBSIDIARY OF NATIONAL LEAD COMPANY

Tall oil, crude, dms., c.l., works lb. .04¼- .04½
tanks, works lb. .02¾- .02⅞
Dist., dms., c.l., works lb. .07¾- —
dms., l.c.l., works lb. .08 - .08½
tanks, works lb. .05¾- .06¼
Refd., dms., c.l., works lb. .07½- —
dms., l.c.l., works lb. .07¾- .08
tanks, works lb. .05½- .06¼
Tall oil acids, dms., c.l., works lb. .08¼ .11¾
dms., l.c.l. lb. .08¾- .12¼
tanks, works lb. .06½- .09¾
Tallow, edible, tanks, dlvd lb. .08⅝- .08¾
Inedible, fancy, bleachable, tanks, lb. .06 - .06⅛
fancy, guaranteed, dms., f.a.s. lb. .67¾- .0780
No. 1, tanks, dlvd lb. .04¾- .04⅞
prime, tanks, dlvd lb. .03¾- .05⅛
special tanks, dlvd lb. .05¼- .05¾
sulfonated, 25%, bbls., l.c.l. lb. .08½- .08¾
50% bbls., l.c.l lb. .10½- .11
Tallow acids, dist., dms lb. .14¼- .16¾
tanks lb. .11¾- —
Hydrogenated, dms lb. .15¾- .18¼
Tallow oil, acidless, dms. c.l. lb. .13½ Nom.
dms., l.c.l. lb. .14½ .16
Tangerine oil, Florida dms lb. 3.10 4.00
Tankage, animal, feeding, 9-11% ammonia New York, bulk unit-ton. 4.75 - —
Animal, feeding, 9-11% ammonia Chicago bulk unit-ton. 5.00 - —
Tannic acid NF fluffy bbls 1,000-lb lots lb 2.05 - —
bbls., smaller lots lb 2.06 2.07
NF, powd., bbls., 1,000-lb lots lb. 1.95 - —
bbls., smaller lots lb 1.96 1.99
Tech. dms lb 1.05 —
Tansy oil, dms lb. 7.25 - 7.50
Tar acid oil, 15-18% dms., c.l., frt equald gal. .53½- —
dms., l.c.l., same basis gal. .55½- —
tanks, same basis gal. .43½- —
25-28% dms, c.l., same basis gal. .60 - —
dms., l.c.l., same basis gal. .62 - —
tanks, same basis gal. .50 - —
50-53%, dms., c.l., same basis gal. .75 - —
dms., l.c.l., same basis gal. .77 - —
tanks, same basis gal. .65 - —
Tar coal (see Coaltar)
Tartar emetic (see Antimony potassium tartrate)
Tartaric acid, NF, 100-lb bgs., c.l., frt equald lb. .41 - —
bgs., 10,000 lbs., 1 shipt., same basis lb. .43 - —
bgs., smaller lots, same basis lb. .47 - —
Terpine hydrate, NF, cryst powd., 100-lb fib dms lb. .70 - —
Terpineol, extra, dms lb. .50 - .60
Prime, dms. lb. .40 - .50
Terpinyl acetate, extra cns. dms. lb. .64 - .75
Prime, dms. lb. .53 - .56
Terpinyl propionate dms. lb 1.75 3.00
Terra alba (see Gypsum).
Testosterone, USP, bots. gram No prices.
Testosterone proprionate USP bots. gram. No prices.
Tetrachloroethane, dms. works lb. .14½- —
Tetrasodium pyrophosphate (see Sodium pyrophosphate)
Tetrachloroethylene tech (see Perchloroethylene).
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works lb. .20½- —
dms., l.c.l., works lb. .22 - .23½
Tetraethyl orthosilicate dms., c.l., dlvd E lb. .60 - —
dms., l.c.l., dlvd. E. lb. .61½- —
Tetraethyl pyrophosphate, 40%, cns., dms., frt equald lb. .75 - —
Tetraethylenepentamine dms., c.l., dlvd E lb. .53½- —
dms., l.c.l., dlvd E. lb .55 - —
tanks, dlvd E. lb .51 - —
Tetraethylthiuram disulfide, tech. dms, frt alld lb 1.04 - —
Tetrahydrofuran, dms c.l., t.l., works lb .36½- —
dms., l.c.l., or l.t.l., works lb .37 - —
tanks, works lb .35 - —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb .31½- —
dms., l.c.l., Memphis, Tenn lb .32½- —
dms., c.l., t.l., Newark, N.J lb .33½- —
dms., l.c.l., Newark, N.J lb .34½- —
tanks, dlvd E. of Denver lb .31 - —
tanks, dlvd W of Denver lb .32 - —
Tetrapotassium phosphate (see potassium phosphate).
Thallium metal, dlvd. lb 7.50 -10.00
Thallium sulfate, 99% bots, dlvd. lb 5.00 -10.00
Theobromine, NF, fib dms lb 4.50 - —
Theobromine and sodium acetate, USP, fib dms lb 4.75 - —
Theobromine sodio-salicylate, NF, fib dms lb 3.90 - —
Theophyline, USP, anhyd., 100-lb. dms., frt, alld lb. 3.65 - —
Thiamine hydrochloride, USP, fib. dms., frt. alld kilo. 36.00 - —
USP, ampule grade, fib. dms., frt alld kilo. 38.00 - —
Thiamine mononitrate, USP, fib dms., frt alld kilo. 36.00 - —
Thiocarbanilide, dms. ton lots lb .72 - —
dms., less ton lots lb. .74 - —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, bgs., works lb 5.20 - —
Tungstated, PTMA, kgs. works. lb 6.20 - —
Thioglycolic acid, refd., chys., 100% basis lb 1.35 - 1.55
Thiosalicylic acid, purif., dms., 1,000-lb., lots, works lb 4.00 - —
Thiourea, tech., bgs., t.l. frt alld. lb. .30 - —
bgs., ton lots, same basis lb. .32 - —
bgs., less than ton lots, same basis lb. .33 - —
Thorium nitrate, purif. fib dms., 100-lb. lots or more, works lb 3.50 - —
di-Threonine, bots., 1-kilo lots kilo. 275.00 - —
Thyme leaves, French, bgs lb 2.20 - —
Spanish, bgs. lb 1.40 - —
Thyme oil, NF, red, cns., dms lb. 1.90 - 2.25
Tech. white, cns. lb 1.40 1.85
USP, white cns. lb 2.20 2.60
Thymol, fib dms lb 2.60 3.00
Thymol iodide, NF dms lb 7.30 - —
Timbo root (see Cube root)
Tin chloride (see Stannous chloride, anhyd.)
Tin crystals (see Stannous chloride, hydrous)
Tin metal (Straits) lb. 1.00 - —
Tin oxide (see Stannic oxide)
Tin sulfate (see Stannous sulfate).
Tin tetrachloride anhyd (see Stannic chloride anhyd.).

Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd lb. .25½- —
bgs., l.c.l., dlvd lb. .26½- —
reg., bgs., c.l., dlvd lb. .25½- —
bgs., l.c.l., dlvd lb. .26½- —
metallurgical, nat., bgs., c.l., f.o.b. Jacksonville Fla ton. 180.00 - —
bgs., 5-ton lots, Niagara Falls, N.Y ton. 205.00 - —
bgs., ton lots, same basis ton. 215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher.
Titanium dioxide, rutile, non-chalking, bgs., c.l., dlvd, E lb. .27½- —
bgs., l.c.l., dlvd. E lb. .28½- —
Titanium dioxide-calcium pigment, 30% Ti O_2, reg., bgs., c.l., dlvd lb. .09⅜- —
bgs., l.c.l., works lb. .09⅝- —
50% Ti O_2, high-tinting, dms. c.l. lb. .14⅜- —
dms., l.c.l. lb. .14⅝- —
Titanium hydride, powd., dms., works lb. 8.10 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. 26 - —
dms., l.c.l., works lb. .27½- .29
tanks, works lb. 20 - —
Tobias acid, dms., c.l., t.l. lb. 78 - —
dms., l.c.l. lb. .81 - —
d-a Tocopherols, NF, mixer, conc., pure basis, bots kilo. 67.00 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo. 122.00 - —
d-a-Tocopheryl acid succinate, cryst., bots kilo 109.00 - —
dl-a-Tocopherol, bots kilo. 99.00 - —
dl-a-Tocopheryl acetate bots kilo. 90.00 —
25% dry, powd., bots kilo. 22.50 24.00
33⅓ dry powd. bots. kilo. 30.00 31.50
o-Tolidine base, dry, kgs., 100% basis lb 1.55 - —
Paste, kgs., 100% basis lb 1.50 - —

TOLUOL
Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine hydrochloride, paste, kgs., 100% basis lb 1.50 - —
Tolu balsam, cns lb. 2.85 - 3.10
Toluene, coaltar, indust. or nitration tanks, dlvd. E. of Rockies gal. .25 - —
Toluene, petroleum indust., tanks, dlvd E. of Rockies gal. .25 - .32
p-Toluenesulfonamide, powd., dms., t.l., works lb. .60 - —
dms., l.t.l., same basis lb. .63 - —
Toluenesulfonic acid, dms., c.l., t.l., works lb. .17 - —
dms., l.c.l., works lb. .18 - —
p-Toluenesulfonic acid monohydrate, dms., c.l. or t.l. lb. .90 - —
dms., 125 lbs. to t.l. lb 1.00 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .79 - —
dms., l.c.l., same basis lb. .80 - —
tanks, same basis lb. .78 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .30 - —
dms., l.c.l., same basis lb. .31 - —
tanks, same basis lb. .28 - —
p-Toluidine, tech., flake, dms., frt. alld lb. .50 - —
Cast, dms frt. alld lb. .45 - —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs. works lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt. alld lb 1.10 - —
Tonka beans, Angostura, cks. lb 1.50 - 1.60
Brazilian Surinam, cs lb 1.25 1.30
Totaquine, 100-oz. lots, cns oz. .42 - —
Toxaphene, dms., c.l., t.l., works lb .22 - —
dms., l.c.l., l.t.l., works lb. .28 - —
Trag acanth gum, No. 1, ribbons, cs lb. 3.60 - 3.75
No. 2, cs lb. 3.40 - 3.60
No. 3, cs lb. 3.15 - 3.25
USP, powd., bbls. lb. 1.05 - 1.15
Triacetin dms., c.l., dlvd. E. of Rockies lb. .39 - —
dms., l.c.l., same basis. lb. .40 - —
tanks, same basis. lb. .37 - —
Triallylamine, dms., c.l., dlvd. lb .985 - —
dms., l.c.l., dlvd. lb. .995 - —
tanks, dlvd. lb. .96 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt alld E of Denver. lb. .42½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .43½- —
tanks, frt alld. E of Denver lb. .40 - —
Tributyl phosphate, dms. c.l., works. lb. .52½- —
dms., l.c.l., same basis. lb. .53½- —
tanks, same basis. lb. .50 - —
Tributylamine dms., c.l., works lb .67½- —
dms., l.c.l., same basis lb. .69 - —
tanks, same basis lb. 65 - —
Trichloroacetic acid, bots. lb 2.00 2.50
Trichlorobenzene, dms., c.l., frt. alld. E lb. .15 - —
dms., l.c.l., frt. alld E. lb. .16 - —
tanks, frt. alld. E. lb. .13¼- —
Trichlorobenzene prices in the West 1¾c. higher.
1,1,1-Trichloroethane, dms., c.l., dlvd. lb. .13¼- —
dms., l.c.l., dlvd. lb. .16¼- —
tanks, dlvd. lb. .12¼- —
1,1,2-Trichloroethane, dms., c.l., works lb. .13½- —
dms., l.c.l., dlvd E. lb. .14¼- —
tanks, works lb. .11½- —
Trichloroethylene, dms., c.l., or t.l., works, frt. equald lb .13 - —
dms., l.c.l., frt. alld. lb 15 - .16¾
tanks, works, frt equald lb 12 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., ret chys, works frt adjusted. lb 1.40 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb .35 - —
dms., l.c.l., dlvd. lb .36 - —
tanks, dlvd lb .32½- —
Tricresyl phosphate, petroleum, dms., c.l., dlvd. lb. .34½- —
dms., l.c.l., dlvd lb. .35½- —
tanks, dlvd lb .32½- —
Tridecyl alcohol, mixed isomers, dms., c.l., dlvd E lb. .26½- —
dms., l.c.l., dlvd. E lb. .28 - —
tanks, dlvd E lb. .24 - —
Triethanolamine dms. c.l. dlvd E. lb. .24½- —
dms., l.c.l., same basis lb. .26 - —
tanks, same basis lb. .22 - —
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld lb. .25½- —
dms., l.t.l., frt. alld. lb. .26½- —
tanks, frt. alld lb. .24½- —

Triethylamine, dms., c.l., dlvd. E. lb. .50 - —
dms., l.c.l., same basis lb. .51½- —
tanks, same basis lb. .47½- —
Triethyl citrate, refd., tech., non-ret. dms., c.l., frt. alld E. of Denver lb. .46¼- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .47¼- —
tanks, frt. alld. E. of Denver lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd. lb. .40½- —
dms., l.c.l., dlvd. lb. .41½- —
tanks, dlvd. lb. .38 - —
Triethylene glycol, dms., c.l. dlvd, E lb. .21 - —
dms., l.c.l., dlvd. E. lb. .22½- —
tanks, same basis lb. .18½- —
Triethylenetetramine, dms., c.l., dlvd. E lb. .51½- —
dms., l.c.l., dlvd E. lb. .53 - —
tanks, dlvd E. lb. .49 - —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .23¼- —
dms., l.c.l., dlvd E. lb. .24¾- —
tanks, dlvd. E. lb. .20¾- —
Trimethylamine, anhyd., cyls., l.c.l., frt. equald, 100% basis lb. .30 - .305
tanks, same basis lb. .26 - —
basis lb. .28 - —
25-40% soln., dms., c.l., works, frt. equald, 100% basis lb. .35 - —
dms., l.c.l., works, frt equald., 100% basis lb. .35½- —
tanks, works, frt equald, 100% lb.
Trimethylolpropane, dms., c.l., t.l., dlvd. E lb. .35 - —
dms., l.c.l., l.t.l., same basis lb. .36 - —
Trioxane, pure, dms, c.l., t.l., works. lb. .50 - —
dms., l.c.l., works lb. .51½- —
Tripentaerythritol, c.l., t.l., dlvd. E. lb. .40 - —
bgs., l.c.l., l.t.l., dlvd E. lb. .41 - —
Triphenyl phosphate, bbls., c.l., frt equald lb. .41½- —
bbls., l.c.l., frt equald lb. .43½- —
Triphenylguanidine, bbls., works. lb. .90 - —
Tripropylene glycol dms., c.l., t.l., frt. alld. E lb. .21 - —
dms., l.c.l., l.t.l., frt. alld. E lb. .22½- —
tankcars and compartmented tankcars, frt. alld. E lb. .18½- —
Tripropylene glycol, tankwagons and compartmented tankwagons, 1,000 gals. min., frt. alld. E lb. .19 - —
Tripropylene glycol prices 1c. per lb. higher in West.
Trisodium phosphate (see Sodium phosphate tribasic)
dl-Tryptophane, 6lb., dms., works. lb. 55.00 - —
Tung oil, dms., c.l., New York lb. .23¾- —
dms., l.c.l., New York lb. .24¼- .24½
tanks, New York lb. .22¼- —
tanks, domestic, mills lb. .21½ Nom.
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb 3.54 - —
Tungstic acid, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
dms., smaller lots, works lb. 2.45 - —
Turkey red, bbls. works lb. .62 - —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns., dms lb. .28 - .50
Tuscan red, bbls. frt. equald lb. .26 - .32
Tyrothricin, USP 1 to 5 kilos gram. .54 - —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd. E of Rockies lb. .35 - .39½
Jobbing types, bbls., same basis lb. .19 - —
Regular types, dry bbls., same basis lb. .22½- .35
Ultramarine blue prices 1c. higher W of Rockies.
Umber pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾
bgs., l.c.l., works lb. .07¾- .08
Turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .08¼- —
Raw, American, bgs., works lb. .07¾- .08¼
Turkey-type, bgs., works lb. .08½- .08¾
Undecylenic acid, dms lb. 1.28 - —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 46% N, indust., bgs., c.l. t.l., dlvd. E ton. 125.00 - —
bgs., l.c.l. dlvd E ex whse. ton. 145.00 - —
45% N, agricultural, bgs., c.l., (20 tons) dlvd. E ton. 103.00 - —
Urea-ammonia liquor, A, B, C & F grades, N basis, tanks, frt. equald ton. 120.00 - —
37 grade, tanks, same basis ton. 145.00 - —
Urethane, USP, dms, t.l., f.o.b., works lb. .65 - —
dms, l.t.l., same basis lb. .70 - —
Uva-ursi leaves, bls lb. .12 - —

V

Valerian root, Belgian, bgs. lb. .32 - —
Indian, bgs. lb. 25 - —
dl-Valine, dms, works lb. 21.00 -27.50
Vanadium pentoxide, tech., dms., works lb 1.28 - 1.33
Vandyke brown, bbls, works lb .09½- .12
Vanilla beans, Bourbon, tins lb. 15.00 - —
Mexican cuts, tins lb. 15.00 - —
whole, tins lb. 15.50 - —
Vanillin, ex lignin 100-lb fib dms., 1,000-lb. lots or more lb. 3.00 - —
100-lb fib dms., 500-lb lots lb. 3.10 - —
100-lb. fib dms., cns., 100-lb. lots lb. 3.25 - 3.35
Venetian red, jobbing, bgs., works. lb. .0475- —
Venetian red, 20% bgs. works lb. .0525- —
25% bgs. works lb. .0575- —
30% bgs. works lb. .06 - —
35% bgs. works lb. .0625- —
40% bgs. works lb .0675- —
Vetiver oil, Bourbon, cns lb. 16.00 -16.50
Haitian, cns. lb. 14.00 -15.50
Victoria blue toner, molybdated, PMA 250-lb bbls., dlvd. E of Rockies lb 4.50 - —
Tungstated, PTA, 250-lb. bbls., dlvd. E. of Rockies lb. 5.55 - —
Victoria blue toner, bbls., prices 1c higher W of Rockies
Vinyl acetate monomer, zone 1, 55-gal dms., c.l. dlvd lb. .20 - —
55-gal dms. l.c.l. dlvd. lb. .21½- —
tanks, dlvd lb. .17½- —
tanktrucks less than 4,000 gal., dlvd lb. .18 - —
Zone 2, 55-gal. dms. c.l. dlvd lb. .21 - —
55-gal dms., l.c.l., dlvd. lb. .24 - —
tanks, dlvd. lb. .18½- —
tanktrucks, less than 4,000 gals., dlvd lb. .19 - —
Zone 1 is all continental US except zone 2, zone 2 comprises Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash.
Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .50 - —
Vinyl chloride monomer, tanks, works lb. .125 - —

Vinyl ether, USP, anesthesia, bots., 50cc., hospitals bot 1.12 - —
bots., 75cc., hospitals bot 1.56 - —
Vinyl ethyl ether, tech., dms., c.l., works lb. .29¼- —
dms., l.c.l., works lb. .30 - —
tanks, works lb. .27¼- —
Vinyl propionate monomer, dms., c.l. dlvd lb. .40 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb 1.20 - —
1 to 9 dms., works lb 1.35 - —
tanks, works lb 1.15 - —
Vinyltoluene, dms., c.l. f.o.b. works, lb. .16½- —
dms., l.c.l., same basis lb .18½- —
tanks, f.o.b. dest. frt. prepaid lb. .14 - —
Viosterol, in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02½- —
Virginia type red, bbls., works lb 1.40 - —
Vitamin A acetate, syn., cryst., beads 500,000 A units per gram gram. .07¼- —
Vitamin A acetate, dry, 500,000 units per gram, kilo lots kilo. 65.00 - —
325,000 units per gram, same basis kilo. 43.88 - —
250,000 units per gram, same basis kilo. 33.75 - —
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher.
Vitamin A, liq. in oil, 1,000,000 A units per gram, 1,000,000 units. .09½- —
Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .09½- —
1,000,000 A units per gram, 1,000,000 units. 09½- —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams, vials, tons gram. 120.00 - —
0.1% vitamin B_{12}, USP, adsorbed on gelatin, 100 and 500-gram bots, on 1-5 kilo dms. gram. 1.43 - —
0.1% vitamin B_{12}, USP, adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms gram. 1.43 - —
Vitamin B_{12}, oral grade solids, in containers of 1 and 10 gram of B_{12} activity gram. 110.00 - —
0.1 percent trituration of cryst. B_{12} with dicalcium phosphate or mannitol, 1-10 kilo. 138.00 - —
Vitamin B_{12}, 0.1% cobalamin concentrate NF, adsorbed on resin, 500-gram bots., 1-5 kilo dms., frt. alld gram. 1.15 - —
0.1% cobalamin concentrate in gelatin, 1-10 kilo dms., frt. alld gram. 1.15 - —
Vitamin C (see Ascorbic acid)
Vitamin D (see Codliver and Fish-liver oils, Calciferol and Viosterol).
Vitamin D_2, dry, 850,000 units per gram, kilo lots kilo 42.50 - —
850,000 units per gram less than kilo lots kilo 45.00 - —
Vitamin E (see a-Tocopherol and Wheat germ oil)
Vitamin G (see Riboflavin).
Vitamin H (see Biotin)
Vitamin K, active (see Menadione).
Vitamin K_1, 25 gram bots ... gram. 4.50 —
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root bark, bls lb. 2.25 - 2.50
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.95 - —
dms., 25-49-lb. lots, New York or Chicago lb. 2.05 - —
dms., 5-24-lb. lots, New York or Chicago lb. 2.15 - —
Watchung-type reds, bbls lb 1.95 - —

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal dms gal. 12.25 - —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls lb. .21 - .22
White precipitate USP powd. dms., lb 6.55 - —
Whiting (see Calcium carbonate)
Wild cherry bark, thin, nat., bls lb. .22 - —
Thin, rossed, bls lb. .22 Nom.
Wintergreen oil, USP, nat., northern, cns lb 6.35 -17.50
USP, nat., southern, cns lb 3.75 - 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls lb .16 - .17
Witch hazel leaves, bls lb .22 - —
Wollastonite, fine, bgs., c.l., works. ton 39.50 - —
bgs., l.c.l., ex whse. ton 56.00 - —
Medium, bgs., c.l., works ton 27.00 - —
bgs., l.c.l., ex whse ton 44.00 - —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat, crude (see Degras).
Woolfat, USP (see Lanolin).
Wormseed, Levant, bgs lb 2.50 - —
Wormseed oil (see Chenopodium oil NF).
Wormwood oil, cns lb. 4.75 - 5.00

X

Xylene, coaltar, indust., tanks, works:
Bethlehem, Pa. gal. .29 - —
Birmingham dist. gal. .29 - —
Chicago dist. gal. .28½- —
Cleveland dist. gal. .29 - —
Geneva, Utah gal. .29 - —
Johnstown, Pa. gal. .29 - —
Lackawanna, N. Y. gal. .29½- —
Lone Star, Tex. gal. .27 - —
Lorain, Ohio gal. .29 - —
Middletown, Ohio gal. .30 - —
Minnequa, Col. gal. .29 - —
Philadelphia dist. gal. .29 - —
Pittsburgh dist. gal. .29 - —
Sparrows Point, Md. gal. .29 - —
Terre Haute, Ind. gal. .29 - —
Youngstown, Ohio gal. .29 - —
Xylene, petroleum, indust., tanks, f.o.b. works:
Bayonne, N. J. gal. .29 - —
Baytown, Tex. gal. .27 - —
Charleston, S. C. gal. .29 - —
Chicago Ill. gal. .28½- —
Detroit, Mich. gal. .29 - —
Houston, Tex. gal. .27 - —
Philadelphia, Pa. gal. .29 - —
Providence, R. I. gal. .30 - —
Sewell's Point, Va. gal. .28 - —
Wood River, Ill. gal. .28½- —

Xylenol, cryst., 45°-47° C., m.p., dms., l.c.l., works	lb.	.23	- —
56°-58° C., m.p., dms., l.c.l., works, frt. equald	lb.	.33	- —
60°-62° C., m.p., dms., l.c.l., same basis	lb.	.40	- —
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis	gal	1.25	- —
dms., l.c.l., same basis	gal	1.30	- —
tanks, same basis	gal	1.05	- —
b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis.	gal.	1.35	- —
dms., l.c.l., same basis	gal	1.40	- —
tanks, same basis	gal	1.15	- —
2,4-Xylidine, tech., dms. frt. alld	lb.	1.15	- —
2,5-Xylidine, tech., dms. frt. alld.	lb.	1.20	- —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works	lb.	.39	- —
dms., l.c.l., same basis	lb.	40	- —
tanks, same basis	lb	.38	- —

XYLOL

Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns.	lb	2.15	3.05
Yeast, brewers, debittered, USP, Saccharomyces dlvd	lb.	.27	- —
Yeast, brewers, dry, USP, 50 Int'l B units per gram, 100-lb. dms.	lb.	.47	- —
USP 90 Int'l B units per gram, 100-lb dms	lb.	.52	- —
Yeast, brewers, USP, 200 Int'l B units per gram, 100-lb. dms.	lb.	.56	- —
USP, 300 Int'l B units per gram, 100-lb. dms	lb.	.60	- —
Torula, USP dlvd	lb	.18	- —

YELLOW PIGMENTS

Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.

Yerba santa leaves, bls.	lb.	.40	- .45
Ylang-ylang oil, Bourbon, bots	lb.	7.00	-22.00
extra, bots.	lb.	28.00	-33.00
Yohimbine hydrochloride, bots., tins.	oz.	3.75	4.25

Z

Zein, bgs., 36,000-lb. lots or more, bgs., 500-lb lots or more, dlvd.	lb.	.343	- —
bgs. smaller lots, dlvd	lb.	.373	- —
Zinc acetate, NF, VIII, dms.	lb.	.53	- —
Tech., dms. l.t.l., works	lb.	.29¾	- —
Zinc borate, bgs., 1,000 lbs or more, works	lb.	.23	- —
bgs., less than 1,000 lbs. same basis	lb.	.25	- —
Zinc chloride, NF, gran., dms	lb.	.42	- —
NF, precip., powd., dms	lb.	.26	- —
Tech. soln. 50%, dms. c.l., works. 100 lbs.		5.80	- —
dms., l.c.l., works	100 lbs.	6.40	- —
tanks, works	100 lbs.	5.15	- —
fused, dms., c.l., works 100 lbs.		10.70	- —
dms. l.c.l. works	100 lbs.	11.20	- —
gran., fib. dms., c.l., works. 100 lbs.		11.45	- —
fib. dms. l.c.l. works	100 lbs.	11.95	- —
Zinc chromate, bbls., dlvd.	lb.	.29	- —
Basic, bbls., dlvd.	lb.	.34	- —
Zinc cyanide, dms., 1,000-lb. lots or more, works	lb.	.55	- —
dms., smaller lots, works	lb.	.57	- —
Zinc dust, comm., bbls., c.l., works.	lb.	.1460	- —
Pigment, bbls., c.l., works	lb.	.16½	- —
bbls., l.c.l., works	lb.	.17	- —
Zinc fluoride, bbls., works	lb.	.49	- .50
Zinc hydrosulfite, dms., c.l., frt. alld	lb.	.21½	- —
dms., l.c.l., frt. alld.	lb.	.23½	- —
Zinc metal, prime western, slabs, E. St. Louis	lb.	.13	- —
Prime western, slabs, New York.	lb.	.13½	- —
Zinc naphthenate, liq., 8% Zn., dms., frt. alld	lb.	.27	- —
10% Zn., dms., frt. alld	lb.	.33	- —
Zinc nitrate, tech., cryst., bbls., works	lb.	.20	- —
Zinc oxide pigment, American process, lead-free, bgs., c.l., frt. alld	lb.	.14½	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.15	- —
bgs., l.c.l., smaller lots, same basis	lb.	.15½	- —
leaded, 35% bgs. c.l., mills, frt. alld.	lb.	.15⅝	- —
bgs., l.c.l. 10 tons or more, same basis	lb.	.15⅞	- —
leaded, 50% bgs., c.l., same basis	lb.	.15¾	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.16¼	- —
bgs., l.c.l. smaller lots, same basis	lb.	.16⅜	- —
Zinc oxide pigment, French process, green seal, bgs., c.l., mills, frt. alld.	lb.	.16¼	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.16¾	- —
bgs., l.c.l., smaller lots, same basis	lb.	.17¼	- —
red seal, ogs. c.l. same basis,	lb.	.15¾	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.16¼	- —
bgs., l.c.l., smaller lots, same basis	lb.	.16¾	- —
white seal, bgs., c.l., same basis	lb.	.16¾	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.17¼	- —
bgs., l.c.l., smaller lots, same basis	lb.	.17¾	- —
Zinc oxide, USP, dms., c.l. frt. alld.	lb.	.18¼	- —
dms., l.c.l., 10 tons or more, same basis	lb.	.18¾	- —
dms., l.c.l., smaller lots, same basis	lb.	.19¼	- —
Zinc phenolsulfonate, NF, gran., dms	lb.	.45	- .46
NF, powd., dms	lb.	.48	- .49
Zinc resinate, precip., 7.2-7.6% Zn., dms., frt. alld	lb.	.36¼	- —
Zinc silicofluoride, dms., works	lb.	.12½	- .14
Zinc stearate, tech., USP, ctns., c.l.,	lb.	.41	- —
ctns., l.c.l.	lb.	.42	- .46
Zinc sulfate, powd., monohydrate, 36% Zn., bgs., c.l., dlvd. E	100 lbs.	8.75	- —
bgs., l.c.l., dlvd. E	100 lbs.	9.75	- —
USP, gran., dms.	lb.	.26	- —
Zinc sulfate in bbls. 40c. higher.			
Zinc sulfide pure, bgs., c.l., dlvd	lb.	.2530	- —
Zinc undecylenate, dms	lb.	2.00	- —
Zinc yellow (see Zinc chromate).			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25	- —
bbls., c.l., works	100 lbs.	10.85	- —
bbls., l.c.l., works	100 lbs.	11.35	- —
Zinc-formaldehyde sulfoxylate, basic, 300-lb. dms., frt. alld	lb.	.26	- —
Normal, 250-lb. dms., frt. alld	lb.	.52	- —
Zircon (G), gran., bgs., c.l., works.	lb.	.03¼	- —
bgs., 5 tons to c.l., works	lb.	.03⅜	- —
bgs., 1 ton to 9,999-lb lots, works.	lb.	.04	- —
bgs., smaller lots, works	lb.	.06½	- —
Milled, bgs., c.l., works	lb.	.04½	- —
bgs., 5 tons to c.l., works	lb.	.04⅝	- —
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04⅝	- —
bgs., 500-1,999-lb lots, works	lb.	.07½	- —
Zircon (G) in barrels 1c. higher.			
Zirconium acetate, soln. 13% ZrO_2, dms., c.l., 30,000 lbs. min., works	lb.	.23	- —
Zirconium hydride, powd., electronic grade dms., works	lb.	14.00	-15.00
Zirconium oxide, CP, white, grd., bbls or bgs., works	lb.	1.50	- —
Electric-fused, lump, bgs., 500 to 1,999-lb. lots, works	lb.	.48½	
bgs., smaller lots, works	lb.	.51	- —
milled, bgs., c.l., works	lb.	.62	- —
bgs., 5-ton lots, works	lb.	.62½	- —
bgs., 1-ton to 9,999-lb. lots, works	lb.	.63½	—
bgs., 500 to 1,999-lb. lots., works	lb.	.64	- —
bgs., smaller lots, works	lb.	.66	- —
Glass polishing grade, 94-97% ZrO_2, bgs., works	lb.	.55	- .65
Opacifier grade, 85-90% ZrO_2, bgs.,	lb.	.27	- .50
Stabilized oxide, 91% ZrO_2, milled, bgs	lb.	.62	- .85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works	lb.	.37½	- —

Drug Business Is Called a Whipping Boy

—Continued from page 5

Smith went on, but they have an "extremely important" bearing on the pricing of prescription medicine.

Pointing out that profits must bear a close relationship to costs and risks, Dr. Smith noted that net profit of the industry, either as a percentage of investment or as a percentage of sales, is exceeded by other industries, although its performance is above average.

"The industry is therefore not at the top."

Dr. Smith's warning of encroaching socialized medicine found two doctors from abroad attacking such a system. One of them was Dr. Walo von Greyerz, Chief Medical Officer of Civil Defense in Sweden. He asserted that socialized medicine in his country has been accompanied by encroachments on the patient's rights of privacy and personal integrity.

The Swedish official explained that only 60 percent of medical service is under government control in Sweden, while the balance is free. However, even the 40 percent of free practice entails red tape because all Swedish citizens carry compulsory medical insurance, he added.

Another attack on socialized medicine came from Dr. Karl Fellinger, professor of internal medicine at the University of Vienna and president of the Supreme Council of Health.

Confidence and Trust Gone

Under socialized medicine in his country, Dr. Fellinger said that the traditional patient-doctor relationship of "confidence and trust" has turned into an "attitude of irritability, often distrust, even hostility."

He added that the system in Austria has been "accompanied by substantial problems for both patients and the medical profession."

One of the highlights of the meeting was the presentation of the 1959 PMA award for outstanding contribution in medical science. It went to Dr. C. N. Hugh Long, of Yale University.

Another award, this one a scroll, was presented to Chet Shaw, former executive vice-president of Health News Institute, by W. H. Blades, president of Wyeth Laboratories and a vice-president of PMA.

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Realism Is Needed

During the past several months, a number of officials of the federal government—including the President—have been seriously expressing concern with respect to the deficit of this country in international trade. Some of them have been quite widely opining, even advising, on what should be done—and by whom—to remedy the red-ink condition. About a fortnight ago, the Secretary of Commerce, primarily and predominantly a businessman, returning from a good-will visit to Europe, said that the increasing tendency to go along with the theory of certain economists that investment in branch plants or existing enterprises abroad—"Capital is our best export"—was Americans' best participation in foreign markets has contributed to the gap in the international balance of payments. He said that he would like to see goods made in this country with American labor sold in Europe.

In the opinion of the secretary, one of the major ways to reduce the trade deficit, which is getting close to four billion dollars, would be for US manufacturers to sell more in foreign markets. He admitted that such exporting could not be expected to wipe out the deficit, but declared that it would be a big help if as much attention were given to selling abroad as is given to selling at home, especially in such matters as meeting the characteristic desires of various markets in styling, packaging and other respects.

The secretary, at least as quoted in the public press, did not pay any attention to the big reason why, even though various European nations have lessened their barriers against US goods, selling such goods there is not easy. That reason is price. Costs of production of consumer goods in this country run anything from five to fifty times as much as those of producers in Europe and Asia. The only way in which that disadvantage could be overcome would be by governmental subsidizing. As that would add at least a third four billion dollars to that of the trade imbalance and that of foreign aid handouts, it certainly would be a whole lot cheaper for the US taxpayers in several ways if there was still more buying from abroad.

A more realistic view of the international trade position of this country was expressed by a top executive of the biggest US oil company at a meeting of a Texas business group about ten days ago. As he sees it, the trade deficit is a "sign not of a sick world economy, but of a healthy one," and to put up trade barriers against creditor nations would be a big push for communist trade offensives. "If one thing is sure," he said, "it is that we cannot go back." But, he emphasized the necessity that US business prove itself capable of "adapting itself to the inexorable demands of the world as it is and as it will be."

It should be clear to any realist that, if business falls short in proving such capability, this country must go back to the minor role it had in international trade twenty years ago—or even forty-five years ago—before the effects of world-warring put most of Europe out of the running. The reasons for that minor role have been somewhat modified in certain respects, but that newer big one of price keeps up the old handicap.

One of those inexorable demands of today's world is presented in the two movements for European economic unity. As those movements, under steadily increasing pressure, must be expected to be progressively allied in pursuit of a common goal, it will be well—yes, imperatively necessary—that US business become adequately informed on what it must face when the result is a free-trade area or a common market. There is much to be learned along the lines of what was told to the German-American Chamber of Commerce in New York ten days ago by an executive of the Hoechst enterprise about the ultimate goal of an Atlantic community, incorporating West Europe and the United States. Business should also know all that was said on the European community subject eight months ago to the London section of the Society of Chemical Industry by the chairman of the ABCM free trade area committee.

Another inexorable demand is that business become duly cognizant and fully appreciative of the fact that the business world is not by any means what it used to be.

The Real Western World

It was with a deal of pardonable pride that we read in the daily press about three weeks ago that the Governor of New York had told a foreign trade meeting that a Pan-American economic union should be created. That pride was supplemented about a week later upon reading that the Department of State had recommended that President Eisenhower "consider still another epic journey—a wide swing through Latin America." Both ideas had been suggested on this page within recent months. The "official" recognition that the big need for closer unity and stronger friendship to combat the political, social and commercial endeavors of communism lies in the real Western world—the Western Hemisphere—can mean much. A far more important meaning can be manifested if the idea of hemispheric unity and friendship is adopted into the policy of US business and its organizations.

If the Governor of New York should be successful within the next decade in his at least latent desire to be President of the United States, hemispheric relations would assume a most important role in federal affairs. He has had excellently contributory experience as co-ordinator of inter-American affairs and assistant Secretary of State for Latin America. In the meantime, having substantial business interests in Latin America, he should be cultivated for leadership by all US business.

Some idea of the need for such leadership doubtless has been engendered among the leaders of the National Association of Manufacturers, as at its recent meeting it was given some suggestions for serious thought in that direction in addresses by the director of the Central Intelligence Agency and the Secretary of the Army on propaganda, and anti-US incitement by Soviet agents in Latin America and other parts of the world, leading to such things as the parleying in Moscow by a Brazilian trade mission on a coffee-for-caviar deal.

There have been no published reports that business responded in any measure to the implication by the chairman of the national governors conference about two weeks ago that he would be "pleasantly amazed" if some private source came up with the $75,000 travel money, lack of which had obliged his group to postpone three scheduled good-will tours by groups of its members in a total of seven countries in South America.

If business has anything like $75,000 to spend on the promotion of good-will that would have some real meaning in Western Hemisphere useful, as well as desirable, relations, it should send real business representatives, picking them, of course, on the basis of recognition of and respect for the differences between Latin Americans and US Americans in political, commercial, social and cultural characteristics. On that basis, the money would be very well spent.

Washington Talks It Over

Chemical Sellers Are Looking Hungrily to Asia—With Its Growing Population and Industry—To Provide the Next Big Frontier for Economic Penetration.

By Ralph L. Cherry
Washington Editor

The US chemical industry is banking on the Asian market becoming a major outlet for millions of dollars of chemical products in the not too distant future. Economists and leaders in the industry say this is a sure bet. With its exploding population and heavy accent on industrial development, they say Asia can't miss becoming the next big frontier for economic penetration.

That the chemical industry is letting no grass grow under its feet is nowhere more clearly demonstrated than in the interest being shown by the industry in the World Agriculture Fair that opened last Friday (December 11), in New Delhi, India.

A review of the roster of American firms supporting the government's effort to make the American exhibit a success—and incidently, the largest ever held in Asia—shows the chemical industry as well represented as any—a fact that could not be said concerning some other fairs held in the past. The listing reads like a cross-section of the chemical directory. These are some that are participating:

Dow Chemical International, Ltd.; E. I. duPont de Nemours & Co.; Wallace & Tiernan, Inc.; International Salt Company; Pfizer International, Inc.; American Cyanamid Company; Shell Chemical Corporation; Amchem Products Company; Rohm & Haas Company; Food Machinery & Chemical Corporation; Monsanto Chemical Company; Eli Lilly & Co.; W. R. Grace & Co.; Merck & Co.; National Starch & Chemical Company, and Procter & Gamble Company.

America's exhibit highlights the fight against insects. Man's newest scientific weapons in his age-long fight to exterminate or control destructive insects—such as the housefly, mosquito, grasshopper, cockroach, wire worm and others—is demonstrated in the exhibits of the chemical industry.

The government has attached top significance to the fair. It is the first international fair to be concerned exclusively with agricultural progress and productivity and the largest ever held anywhere in Asia. Competing against the US exhibitors are the Soviet Union, Poland, East Germany, Mongolia, Burma, Ceylon, Pakistan, the United Arab Republic, South Viet-Nam, Afghanistan, India and the Food & Agricultural Organization of the United Nations.

25 YEARS AGO IN Oil, Paint and Drug Reporter

(ISSUE OF DECEMBER 17, 1934)

"Will it ever be fully clear to business that it lives on consumers alone," asks OPD in an editorial, as passage of unemployment insurance and social security legislation looms in Washington. Employees need some kind of income protection to protect buying power, the editorial goes on to say. But OPD comes out in favor of "employment assurance," an alternative method aimed at preventing the boom and bust cycle with its attendant lay-offs. This method, regrettably, has not crystallized in a national movement, like that of unemployment insurance, the editorial notes. "But properly evaluated, employment assurance will be seen to be far more acceptable than insurance: and it would be substantially less costly."

Geigy Company, of Switzerland, internationally known manufacturer of dyes, has purchased the industrial plant formerly owned by the Duryea Manufacturiing Company in Bayonne, N. J. The purchase is part of an expansion plan that has been contemplated by the company for several years. Geigy plans to start up the plant on March 1, 1935.

The Department of Agriculture will continue to work for passage of legislation to strengthen the food and drugs act, Secretary Henry A. Wallace declared in his annual report. False advertising should not be continued without restraint, the secretary said.

50 YEARS AGO

(ISSUE OF DECEMBER 13, 1909)

The California supreme court has upheld the limited price plan. With a single dissenting voice, the judges held that a contract between a manufacturer and a seller which involves a fixed minimum selling plan is legal. The case of Grogan vs. Chafee involved a brand of olive oil made by Grogan, on which Grogan had set a minimum price. Chafee, a Los Angeles grocer, sold and advertised the goods at less than Grogan's minimum. Thereupon, Grogan sued Chafee.

75 YEARS AGO

(ISSUE OF DECEMBER 17, 1884)

One of the errand boys for a Cedar Street, New York, drug house was discovered last week in some petty thefts, and after an investigation it was found that he had purchased a systematic course of stealing for some time. Everything of value seems to have clung to his fingers. The boy is only fourteen years of age and one of the most cleanly and innocent looking chaps to be found anywhere. "His favorable appearance and good parentage did not save him, as he was bounced."

Heavy Chemicals

Steel output was to rise to a record level last week, according to an advance estimate of the American Iron & Steel Institute, and it probably did, judging from the way hydrochloric and hydrofluoric acids were moved to Pittsburgh. The paper industry, not to be outdone, operated at better than ninety percent of capacity, and absorbed a substantial quantity of aluminum sulfate and other bases in the process. Everywhere, said trade sources, the wheels of industry are turning with renewed vigor as the economy jackknifes up out of steel strike-induced lethargy.

Soda ash was absorbed by glass makers in good volume, it was reported. Sulfur was said to be in active call from rubbermakers.

On the subject of sulfur prices, a consensus of industry views gave this picture:

Discounts have been and are available at many points but not on a regular or uniform enough basis to constitute or give rise to a price reduction. All major producers, it is stressed, are sticking with list prices. Sporadic reports in the press of a price cut have been met with vigorous denials from producers.

Producers, it appears, expect the keen competition to continue, but do not feel that aggravation of it will bring a price reduction, even if it should become more grave.

Mercury has been steady for two consecutive weeks, giving rise to trade speculation that the long spell of easier prices may have come to an end. Tin firmed one cent on good news from abroad. Lead looked soft to some, but closed the week unchanged. Zinc was in good demand, and strong, copper was static on reports of static labor situation.

The American Paper and Pulp Association reported production for the week ended December 5, at 94.5 percent of theoretical capacity as compared with the figure of 93.7 percent for the previous week and 87.6 percent for the corresponding week of last year.

Price Trends

Advanced

Tin, straits, metal, 1c. per lb.
Tin salts, ½c.-3/5c. per lb.

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Dec. 12, 1958
106.79	106.79	107.01	103.53

For Current Prices see page 9

Acids

Boric—Higher prices, established April 1, have been unchanged for the balance of the year. Most grades have been in good demand and all in adequate supply.

Chromic—Market steady, buying interest seasonally active.

Hydrochloric—Market has continued to firm up under the influence of rising steel output. Brisk sales are taking place at long-established list prices, trade sources report. Supply, plentiful to excess during the steel strike, is now in good balance, these sources note.

Hydorfluoric—Aluminum, the largest single outlet for HF, remains blessed with labor peace, but the truce is tied to the situation in steel. If the present injunction period brings no settlement in steel, the union may well stiffen its attitude toward aluminum makers, trade sources say.

Business pace right now is brisk, prices steady, supply adequate.

Sulfuric—American Iron & Steel Institute has estimated steel output during the week just ended at a record 2,671,000 tons, or 94.3 percent of capacity, as against an actual total of 2,650,000 tons, or 93.6 percent of capacity during the previous week. A month ago, output totaled 1,291,000 tons, and a year ago 1,985,000 tons.

Bases and Salts

Bauxite—Production of bauxite declined 10 percent during the third quarter from that of the second quarter, according to a Bureau of Mines report.

But for the first three quarters as a whole, output was 24 percent greater than in the corresponding period of last year, the Bureau noted.

Imports during the quarter totaled nine percent over those of the second quarter. Jamaica supplied 53 percent, Surinam 36 precent, Dominican Republic six percent, and Haiti and British Guiana the remaining five percent.

The Bureau has estimated 1959 output at 1.5 million tons, an increase of 14 percent over 1958 production; imports at 8 million tons, a slight increase over 1958.

Highlights of the year, the Bureau recalled, were start-up of production at a 430,000 ton capacity alumina plant at Gramercy, La., and of an 182,500 ton unit at La Quinta, Tex. Altogether, 800,000 tons of aluminum capacity were added during the year.

Investigations into the possibility of extracting alumina from Hawaiian bauxite continued during the year under the aegis of the Bureau, Hawaii and the US government's Geological Survey.

Sulfur—A consensus of views on the pricing situation gives this picture:

Discounts have been and are available at many points but not on a regular or uniform enough basis to constitute a price change. All major producers, it is stressed, are sticking with the list prices. Sporadic reports in the press of a price cut have been met with vigorous denials from producers.

The price shading is a result of keen competition for business—not so much because there's a supply surplus as because there are more producers in the field than are found in other more stable industries, in the opinion of observers.

Turning to the end-use picture, it is reported that consumption of rubber, a major sulfur outlet, increased to 147,643 long tons in October from 146,111 in September and 137,693 in October, 1958. Stocks, according to the Department of Commerce, closed the month at 264,779 tons.

The October total included 42,896 tons of dry natural rubber, 6,153 tons of latex, 81,963 tons of S-type synthetic rubber, 5,965 of butyl, 7,538 of neoprene and 3,123 of S-type.

Consumption of reclaimed rubber totaled 26,022 tons in October as against 25,137 in September, the report noted.

Nonferrous Metals

Aluminum—Business & Defense Services Administration reports a substantial increase in imports of aluminum semi-fabricated products for the first nine months of the current year.

Imports of plates, sheets, bars, rods, circles and miscellaneous items, BDSA says, amounted to 75,707,000 pounds, a 100 percent increase over 1958.

Imports of thin foil were nearly double those of the comparable 1958 period, while thick foil imports were up 74 percent.

Crude aluminum imports during the first nine months totaled 369 million pounds, off four percent from 1958. Powder imports were up 37 percent and scrap imports up 14 percent, BDSA noted.

Lead—The price, advanced ½c. to 13c. per pound, New York basis, on August 31, continues quoted at that level, but, according to trade reports, the undertone has turned softer, and a retreat to former levels is not entirely ruled out during the weeks ahead.

A boon to domestic lead producers, the import quota program has been received with less than enthusiasm by domestic smelters and countries that export primary metal to this market.

A petition, asking that the program be killed and replaced by reasonable duties, has been sent to the Tariff Commission by domestic smelters. And at least two exporting countries have threatened to take retaliatory measures unless they are permitted a greater share of the American lead and zinc market than that permitted under the quotas system.

Domestic stocks of lead stood at 200,000 short tons just after the program went into effect last year. They have since fallen to 120,000 tons, approximately.

Magnesium—Net shipments of magnesium mill products during October amounted to 2,220,000 pounds, reports the Census Bureau. This total was three percent below that of September. No allow-

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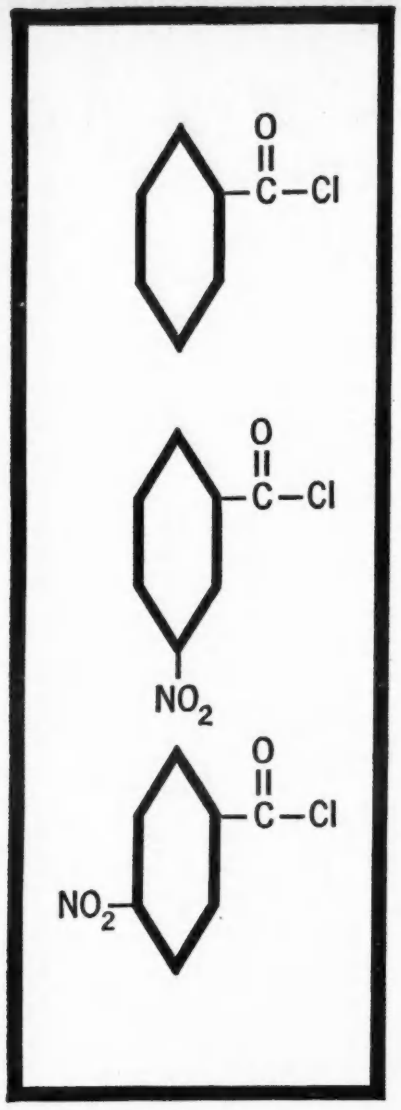

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Heavy Chemicals

ance has been made for usual seasonal changes or number of working days in compiling these figures or in computing percentage changes from previous periods, the Bureau advises.

Manganese—Mines shipments of manganese ore in August declined fifteen percent from July to 26,200 short tons, according to the Bureau of Mines.

And from the Bureau of the Census comes word that imports of manganese ore containing 35 percent or more manganese totaled 206,364 tons in the same month, an increase of 18 percent over July. Of the total imports, Brazil supplied fifty percent, Ghana 13 percent, Union of South Africa and India each nine percent.

Imports of ferromanganese, according to the Census report, declined sharply to 6,984 tons, less than half that imported in July. Total quantity of new material —mine output and imports—increased eight percent over July's level to 239,548 tons.

Output of manganese alloys was 28,469 tons in August, a decrease of 39 percent from July.

Mercury—Prices held steady at $215 to $217 per flask, large lots, spot or prompt delivery.

Silver—Quotations have been long unchanged at 91⅜c. per troy ounce, spot.

Selenium—Output of selenium and compounds reaches 195,823 pounds in the third quarter, down 23 percent from 252,942 reported for like period of last year.

Shipments in same quarter touch 178,328 tons (selenium basis), down sharply from 269,941 in second quarter.

Producers' stocks close quarter at 411,755 pounds.

Bureau of Mines blames lower output and shipments on copper strike, notes that strike caused several selenium producers to close shop during September and part of August.

Imports during first nine months total 118,083 pounds, 72,268 of them from Canada, Commerce Department says.

Price of commercial selenium quoted at $7 a pound, high purity at $9.50 a pound, effective February 19, 1958, no change since then.

Thorium—General Services Administration will sell approximately 50 short tons of surplus thorium residues. Sales will be on a negotiated basis. Offers will be received for a period of forty-five days.

These residues may be processed to thorium metal, oxide or other derivatives.

Tin—Straits metal closed at $1, up one cent from a week ago.

ITC has increased export quotas for producing countries by 6,000 tons to 36,000 tons for the first quarter of next year. Pool stocks, as of June 30, were reported as 13,990 tons.

The ILA dock strike may resume at Southern and Gulf ports at the end of the injunction period. If so, northern dockers may walk out in sympathy although they have settled with the company. This, of course, would put a squeeze on tin.

Zinc—The metal has been in excellent demand from steel companies. In consequence, shipments were sharply higher in November, and with output about unchanged, stocks were correspondingly lower. The following figures, covering zinc in November, have been issued by the American Zinc Institute:

- Output totals 62,346 tons as against 63,938 in October.
- Shipments advance to 77,440 tons from 65,723 in October.
- Stocks close at 176,157 tons, down from 191,251 a month earlier.
- Year's production through close of November stands at 788,354 tons, with a monthly average of 71,669. Shipments during the same period total 802,434 tons, with a monthly average of 72,949.
- November output includes 23,262 tons of special high grade zinc, 4,578 tons of high grade, 220 of intermediate and 34,286 of prime western (incluuding select & brass special).

In the current market, zinc buying is well sustained, the price steady at 12½c. per pound, E. St. Louis.

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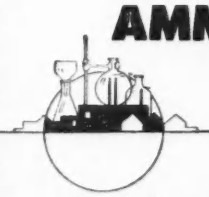
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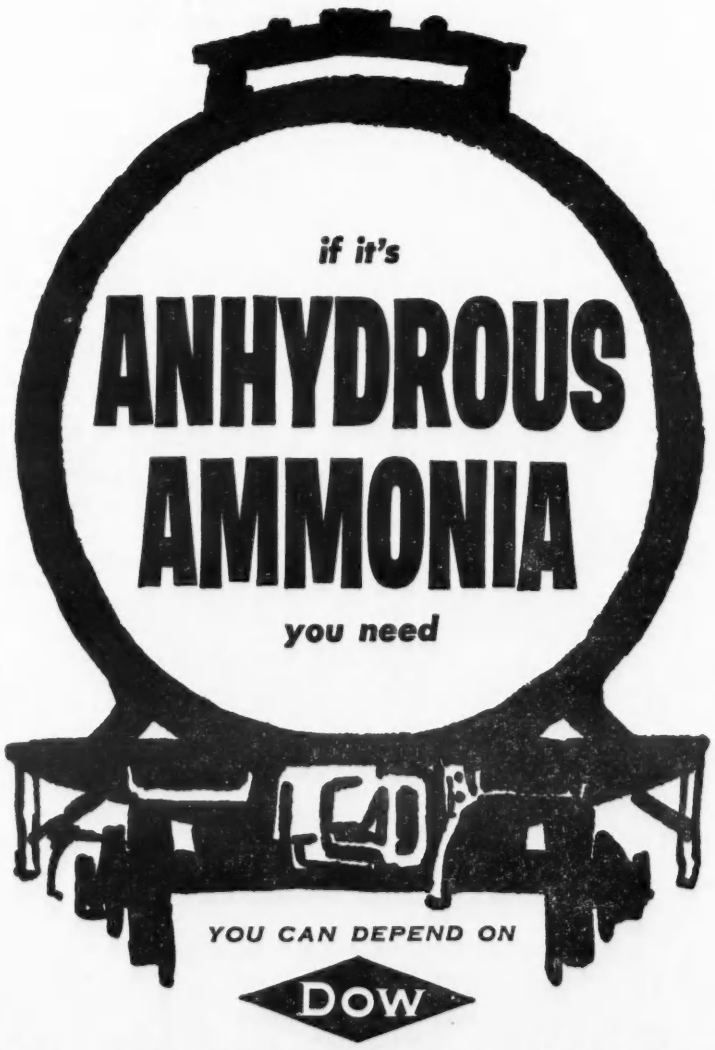

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Jobs & People

Cargill, Inc., Minneapolis, Minn.—**Robert J. Coons** has joined the research staff as a chemist to assist in developing vegetable oil-based paint vehicles and alkyd resins.

Ciba Pharmaceutical Products, Inc., Summit, N. J.—**Dr. Sam Barkulis** has been appointed director of microbiological research.

Dow Chemical Company, Midland, Mich. — **Robert C. Witt,** formerly a coatings salesman, has been made product manager for the sale of latexes to the paint industry and of coatings materials for building products.

E. I. duPont de Nemours & Co., Wilmington, Del.—**Carl A. Bartle,** a long-time duPont sales executive and a widely-known figure in the rubber industry, has retired from the company after thirty-seven years of service.

Geigy Agricultural Chemicals, a division of Geigy Chemical Corporation, Yonkers, N. Y.—**Donald M. Mohr** has been appointed to the sales staff to represent Geigy in New Jersey.

Gillespie-Rogers-Pyatt Company, New York—**Alvah W. Bickner** has been made sales representative for the territory comprising western New York state and the midwest.

Hercules Powder Company, Wilmington, Del.—**Henry F. Pierce** has been named appointed assistant sales manager of the agricultural chemicals division's naval stores department. He has been senior technical representative of the division since 1956.

International Minerals & Chemical Corporation, Skokie, Ill.—**James E. Sovocool,** a sales representative in Buffalo, N. Y., since joining IMC in 1955, has been advanced to district sales manager at Woburn, Mass.

Naugatuck Chemicals, a division of Dominion Rubber Company, Ltd., Montreal, Canada—**J. A. Pym** has been named plastics section manager of the development department.

Phillips Chemical Company, a wholly-owned subsidiary of Phillips Petroleum Company, Bartlesville, Okla.—**A. J. Head** formerly manager of manufacturing divisions, has been named manager of the company.

Research - Cottrell, Inc., Bound Brook, N. J.—**Dr. Harry J. White,** director of research and development, has been named to the board of directors. **Ralph L. Chamberlin,** director of engineering, has been appointed secretary of the company.

United States Borax & Chemical Corporation, New York—**Kenneth L. Magnuson** has been appointed assistant controller of the company.

Olin Mathieson Expanding In Aluminum Fabrication

Olin Mathieson Chemical Corporation has taken a further step in its expansion into the aluminum fabrication field through acquisition of Almetco, Inc., by purchasing the one-half interest formerly held by Textron, Inc.

Almetco operates an aluminum extrusion plant at Nesquehoning, Pa. The unit was formed in October, 1958, by Olin Mathieson and Textron as a jointly-owned subsidiary.

Harry E. Gude will continue as president of Almetco and as a vice-president of the parent firm. Other personnel also will be unchanged, the company reports.

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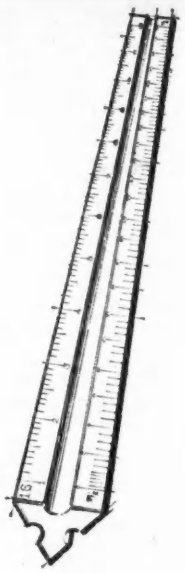

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Connor to Kefauver: Take Closer Look

—*Continued from page 3*

per 1,000 tablets, while Merck was listing the price of its product to druggists at $170.

Mr. Connor disputed the evidence of Dr. Blair, saying it was based on some "mythical" company. The fact of the matter is, he said, in Merck's case there had to be added to the basic cost of the drug such items as a 33⅓ percent mark-up before taxes, an average profit of 13.8 percent, and 11.9 percent for advertising.

Dr. Blair said that the $13.61 price was not from a mythical company, but was computed on the basis of the bulk selling price of Syntex, a Mexican firm engaged in production of these drugs, during the third quarter of last year. He also remarked that Syntex spent about 18 percent of its sales dollar on research.

Says Syntex Ran in Red

Mr. Connor commented later that the financial statement for Syntex showed that it ran in the red about $500,000 last year.

Mr. Connor produced a financial analysis of another drug, which he said was typical of his company's efforts. This is a hormone known as dexamethasone, marketed under the trade name "Decadron." He said the average cost of the drug to a patient was 27.2 cents per tablet. Merck sells it to druggists for 10.7 cents and makes a profit of 1.68 cents per tablet after taxes.

When asked why Merck does not meet the prices of several small suppliers of prednisone offering the drug to druggists at prices ranging from $4 for a bottle of 100 tablets to $12, Mr. Connor told the committee that his company has thirty competitors in this drug field, which he divided into three categories:

First, the "creators" like Merck who develop new products through extensive research efforts.

Second, the "molecule manipulators," researchers who "don't knock home runs first" but capitalize on the efforts of others.

Third, the "coattail riders" who "neither sow nor reap, but the Lord seems to take care of them anyway. They wait until the market becomes established and then set their prices."

He was questioned extensively on the reason for differences in costs of drugs here and abroad. The committee produced evidence of selling prices of prednisone in about a dozen foreign cities or countries. In five instances the prices abroad were lower than those in this country. The figures had been gathered by the State department.

Challenges Accuracy of Prices

Mr. Connor challenged the accuracy of the prices reported and said he would have to make his own examination before he would accept the State department report. But even so, he added, there is a common misunderstanding of prices at home and abroad.

In the case of Merck steroids, he said, 70 percent of sales abroad are of the products produced by Merck's own foreign branches. He said that foreign costs, including labor and material, are far lower than those in this country. Detail men are paid $210 a month in Britain, he said, but $600 a month here. Secretaries, he continued, receive $112 a month in Holland and $390 a month here.

He added that there are so many factors entering into the price differences here and abroad that it is impossible to make a true comparison. Different market conditions exist in different countries and these have to be met, he stated.

In his opening statement to the committee, Mr. Connor traced Merck's twenty-six-year research effort in the corticosteroids field that reached a climax in 1948 when it was discovered at the Mayo Clinic that Compound E could successfully treat rheumatoid arthritis.

To stress the importance of the work and development in this field he called on two Nobel Prize winners, Dr. Edward C. Kendall of the Forrestal Research Center of Princton University and Dr. Philip S. Hench of the Mayo Clinic, for testimony describing these efforts.

When the importance of this discovery was revealed to the public, Mr. Connor continued, Merck directors in 1949 adopted the policy that the company should not attempt to maintain an exclusive position in the drug, but should enable competitors to get into the business.

To show how competitive the market became, he cited marketing statistics showing that Merck had 100 percent of the drugstore and hospital market in 1950, but had slipped to only 54.8 percent three years later. That experience taught Merck the importance of a fine sales force trained to service the medical profession, he said, and that was the reason for the merger with Sharp & Dohme.

The introductory price for cortisone in 1959 was $200 a gram, about enough to reimburse the company for out-of-pocket expenses in production at the time, he said. As production efficiency improved, the company reduced prices eight times in three years to a low of $20 a gram in 1952.

All eight price cuts were initiated by Merck and were not made under pressure from other drug firms, he said.

Connor Quizzed at Length

Committee investigators interrogated Mr. Connor at some length on Merck's bidding for government contracts because the prices it offered to the government were far below the $170 price listed for sales to druggists.

Paul Rand Dixon, counsel for the committee, introduced evidence of two instances in 1958 when Merck offered to supply the Military Medical Supply Agency with 5 mg tablets of prednisone at a price of $75 per 1,000 and $63.70 per 1,000.

Merck failed to get the contracts because it was under-bid by two small concerns which offered to supply the drug at $41.50 and $20.98, respectively.

He also referred to a negotiated contract with the Veterans Administration under which Merck supplied the agency with 100,000 tablets of the drug at $136 per 1,000 and a month later the VA was able to purchase the same quantity from a small concern at $38.50 per 1,000. Mr. Dixon wanted to know why there should be such a wide difference in prices.

Mr. Connor explained that the competitive conditions are vastly different between doing business with the government and with druggists. Merck tried to be competitive in all channels of trade, he said, and the committee should realize that the government offers conditions of sale quite unlike those of other buyers.

Cites Huge Gov't Orders

He pointed out that the government purchases in quantities unmatched by other buyers and a supplier can bid for the government contracts without having to be concerned about the Robinson-Patman act and its restrictions on discounts between customers. In dealing with the druggists, on the other hand, he continued, a supplier is compelled to treat all alike.

Also, the government relies on its own specifications for quality and potency. The important feature of built-in qualities, integrity of producer and know-how is not an important factor to the government, Mr. Connor said. It is because of this that the small suppliers have a better opportunity to do business with the government than does the larger firm, he said.

His answer, however, did not satisfy Sen. Estes Kefauver, the committee chairman. Said the Tennessee lawmaker:

"I just don't understand how you can sell to the government at a price one-third of that charged to a pharmacist. It doesn't seem right to me. You must make a profit on the government business or else you wouldn't bid on it. Why can't you give the public a little break?"

Mr. Connor repeated that conditions of doing business with the government and with druggists who purchase in comparatively small quantities are so different that there is no comparison.

Whether the company loses money or makes a profit on the business with the government is something he could not answer, he added, because the books are not kept in such a way as to show the profit on a specific transaction.

Wide Range Between Manufacturers

He agreed that the steroids purchased by the government or sold to the public generally must all meet the USP standards, but added that even so there is a wide range in quality as between various manufacturers. A physician knows that when he prescribes a product of Merck that his patient will be getting a drug with built-in quality and integrity of manufacture, Mr. Connor said, and this is something he would not be sure of in prescribing a product of some other supplier.

Mr. Connor was also questioned extensively as to why Merck's prices of prednisone to druggists had not fallen in three years while bulk prices of the drug had dropped from around $11 to $3.25 per gram.

Mr. Connor explained that competitive conditions between bulk sales and those made to druggists would account for this situation. In making bulk sales it is not necessary to have the staff of detail men needed in selling to druggists, nor do you have other distribution costs, he explained.

"We couldn't stay in business if we relied just on government purchases and bulk sales," Mr. Connor said. "We would be out in the street."

IN MANAGEMENT POSTS: Allison K. May (left) named manager of surfactants and related chemicals by Antara Chemicals, a sales division of General Aniline & Film Corporation, New York. Eldin S. Underwood (right) appointed manager of heavy chemicals for Antara. Mr. May has been with Antara since 1957 and Mr. Underwood since 1953.

Phosphoric Acid Facility Planned By Coastal Chemical

Coastal Chemical Corporation, Yazoo City, Miss., plans to build a new phosphoric acid unit as well as several other facilities, it is revealed in a stock registration statement filed by the company last week with the Securities & Exchange Commission.

Among the other facilities Coastal intends to construct are additional storage for bagged fertilizer, additional wharf and dock facilities and additional storage for its mixed fertilizer plant.

To accomplish this, Coastal is seeking registration of 111,729 shares of class A common stock and 70,000 shares of class C common. All of the class A common and 20,000 shares of the class C common are to be offered for sale for the account of Coastal, at $30 and $25, a share, respectively.

The remaining 50,000 class C shares are owned and are to be offered by the Mississippi Chemical Corporation, also at $25 a share.

Coastal has a plant near Pascagoula, Miss., which turns out high analysis water soluble fertilizers.

Diamond Names Wilkerson To Head Chlorinated Division

Diamond Alkali Company, Cleveland, Ohio, has advanced Martin F. Wilkerson from branch manager of the southwest sales office to sales manager of the chlorinated products division.

Succeeding Mr. Wilkerson as head of the southwest office is Robert L. Walker, formerly sales representative in that district.

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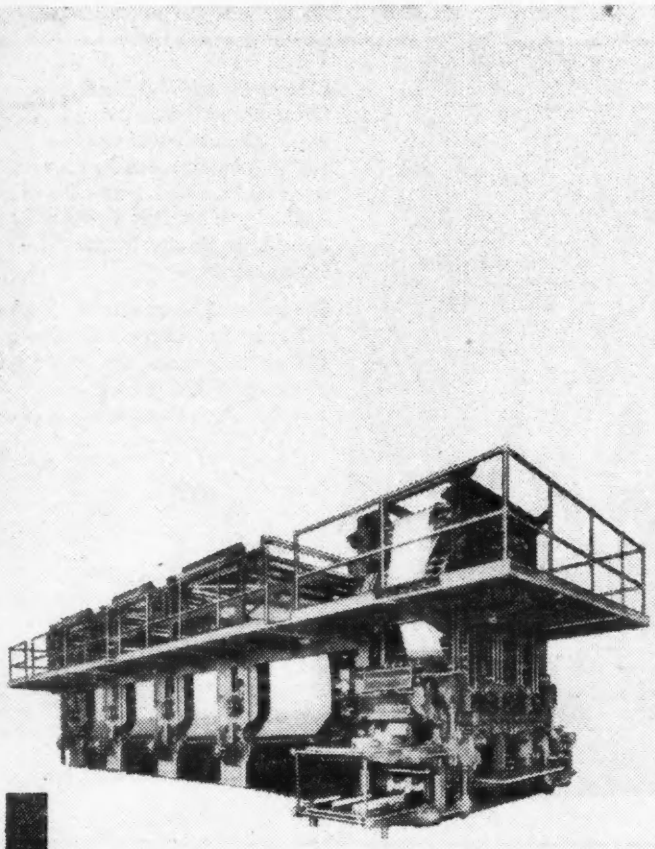

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Petroleum Derivatives

The main interest in the petroleum derivatives market this week is focused on the price pattern being set in benzene. As one petroleum company after another came out with the price increase, it was just a matter of time before the cokeoven producers would bring the price of cokeoven benzene in line with their petroleum competitors. Late last week two major steel companies announced the new price of cokeoven benzene would be 34 cents a gallon.

The tight supply of benzene has not improved despite the rapid return to production of the steel operators. It had been anticipated that more than enough benzene would be available during the first quarter of next year. Now most producers feel that it will be the second or third quarter of 1960 before benzene will be spilling into pipelines in adequate amounts. Meanwhile, spot benzene is as difficult to come by as ever.

Elsewhere, the market is quiet. In the aromatics, toluene and xylene are in a long supply position. The situation in toluene is improved somewhat by the report that a large shipment of toluene is due for export and this should lessen the surplus at least in the Gulf area.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 12, 1958
103.04	103.04	103.04	104.54

For Current Prices see Page 9

January 1 Price Advances

Benzene, 3c. per gal.

The metal shortage caused by the strike has not been entirely alleviated and as a result still adversely affects solvent demand. This is especially true in the case of xylene whose supply position suffers from the slowdown in operations of the metal fabricators. The aliphatics generally have escaped the pinch caused by the steel shortage except in case of solvents used in paint applications. Sales and prices are unchanged.

Aromatic Solvents

Benzene—The price increase that was announced last week by several petroleum producers is expected to be followed throughout the market. Most observers feel that the increase will become market-wide in a short time. In line with this, at least one major steel company announced late last week that the price of cokeoven benzene would be 34 cents a gallon effective January 1. It is expected that the rest of the cokeoven operators will follow this price pattern.

The tight supply picture of benzene that has plagued the market over the last three months shows no sign of easing, according to some producers. A while ago it was the consensus that plenty of benzene would be around. come the first quarter of 1960. It seems that producers now feel that it will be the second or third quarter before benzene will spill into pipelines in sufficient quantities to satisfy demands.

Imports of benzene, particularly benzene from Communist refineries, has fallen off and is not as plentiful as was the case earlier this year. As a result spot benzene is harder to come by than ever.

Toluene—The gradual building up of stocks of toluene that has been growing progressively over the last month shows some signs of easing up. There is a report that a large shipment of toluene is slated for Europe from the Gulf area. This should siphon off some of the surplus and bring about a pleasantly comfortable supply position in this market. The rapid return of the steel mills should also add to the improvement of the supply picture of toluene by way of an increase in the operations of metal finishing.

Xylene—As the steel industry gets back into gear and the metal fabricators resume operations there should be an improvement in the xylene demand picture. As it is now, stocks of xylene are building up as they have been since the steel strike. The surplus will be around for at least another quarter as the metal shortage wears off. Prices remain the same.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended November 28 totaled 252,665,000 barrels, according to data reported by the Bureau of Mines. Compared with the total of 252,473,000 barrels the preceding week, this represents an increase of 192,000 barrels comprising an increase of 182,000 barrels in stocks of domestic crude and an increase of 10,000 barrels in stock of foreign crude.

Aliphatic Solvents

Hexane—With vegetable oil solvent extraction operations taking its share of solvent demand the market is moving at a good pace. Diluent uses have suffered because of the steel strike and its effect on industrial lacquer finishing. Prices are firm and unchanged.

Mineral Spirits—Overall demand for both the odorless and regular types of mineral spirits is well sustained. The paint trade has been hurt somewhat by the cutbacks in housing due to a shortage of structural steel and this is expected to result in a decrease in demand for solvents used in paint applications.

Metal scarcity has also adversely affected industrial finishing operations which use both aromatic and aliphatic solvents. As steel stocks are brought up to operational levels this situation will have been eased and a corresponding increase in solvent demand is anticipated.

LPG's

Butane-Propane Mix—According to the American Petroleum Institute, production of this gas declined in output in 1958. Production for the period November 1 to 15 of LP gas was 23,584,000 gallons. Output from refinery sources was placed at 1,947,000 gallons, in 1958 it was 27,005,000 gallons and 2,345,000 gallons respectively.

Iso-butane—Production of this LP gas for the first two weeks of November was 28,230,000 gallons, an increase from the same period in 1958 when output measured 22,161,000 gallons.

Miscellaneous

The API estimates that the daily average production of crude oil and lease condensate for the week ended November 27 was 6,968,675 barrels.

Reports received from refining companies indicate that the industry as a whole ran to stills on a Bureau of Mines basis approximately 7,973,000 barrels of crude oil daily and produced 28,957,000 barrels of gasoline; 2,333,000 of kerosine; 12,904,000 of distillate fuel oil and 7,040,000 of residual fuel oil during the week; and had in storage 179,179,000 barrels of finished and unfinished gasoline; 31,692,000 of kerosine; 170,886,000 of distillate fuel oil and 56,189,000 of residual fuel oil on November 27, 1959.

According to the Bureau of Mines, current reports of the industry for the week ended November 27, 1959 indicate an increase in crude-oil production and a decrease in crude runs. According to the API, the daily average output of crude (including lease condensate) was 6,969,000 barrels, an increase of 34,000 barrels from the preceding week. Daily average crude runs to stills of 7,973,000 barrels were 44,000 barrels below the preceding week, and 188,000 barrels above the week ended November 28, 1958. Runs of foreign crude amounted to 1,030,000 barrels daily, compared with 1,130,000 barrels in the preceding week. For the four-week period ending November 27, crude oil production averaged 6,920,000 barrels daily, and crude runs to stills averaged 7,891,000 barrels daily with runs of foreign crude averaging 1,022,000 barrels daily.

Monsanto Makes Changes In Its Plastics Sales Division

Monsanto Chemical Company has revamped the marketing department of its plastics division to broaden its scope and integrate managerial responsibility.

Under the new set-up, district sales offices in New York, Chicago and New England will operate under dual district management—one marketing group handling plastics, another resin products. The Cleveland, Ohio, and St. Louis, Mo., sales offices become plastic products offices and the Detroit, Mich., office becomes a resin products office. Sales offices at Los Angeles and Seattle, Wash., will continue handling all divisional products. The Charlotte, N.C., office will be discontinued.

FDA to Take Hard Line

—Continued from page 3

and technical effects of the additive are in such foods.

- The amounts of the food additive expected to remain in the foods.
- Why a food additive regulation has not been requested, if no request has been made.
- Evidence indicating that the proposed uses of the additive will not jeopardize the public health.

Mr. Flemming said that the processing of requests for extension will be time-consuming and recommended that manufacturers who wish to apply for extensions submit their applications in the near future. He said that requests for extensions should be submitted to the Commissioner of Food and Drugs.

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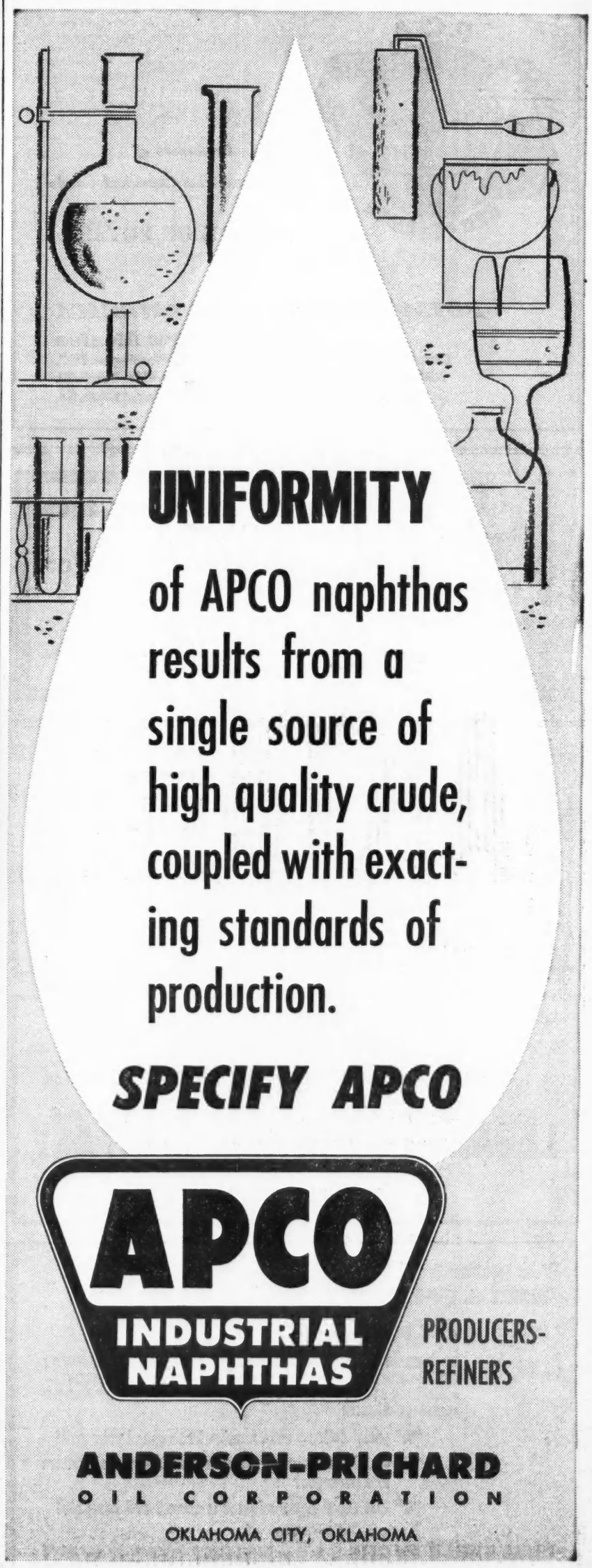
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Agricultural Chemicals

While few people today deny the advantages of chemical weedkillers, some do, however, continue to question the safety of using them. To quell these feelings of distrust, the National Agricultural Chemicals Association has just released a report about the detailed research that is carried on by manufacturers to determine the safety of these materials. To begin with, NACA says, research on toxicity starts as soon as a compound is found to have any potential use. These first tests are on acute toxicity to animals and humans.

Then, if the compound passes safety and effectiveness criteria, research goes into a new stage. It attempts to discover what kind of mammalian injury might be expected from exposure to significant amounts of the compound over an extended period of time. Minute studies are made on laboratory animals to determine what effects, if any, the compound has on organ systems and the skin.

Next on the agenda: field testing. Extensive studies are made of residues, if any, which are left on food crops. At the same time, studies are made of biological effects on mammals. These are to determine whether the chemical is absorbed, and what effects it has, if any.

The final step in evaluating a new weed killer involves large scale field testing. Long term toxicity tests are carried on at the same time. These may run two or three years or more.

When a chemical weed killer is to be used on food crops, all the data collected over this period is checked by Federal Food & Drug Administration scientists against work done in their own laboratories.

Then a safe level for residue of the chemical (called a tolerance) which may remain on a crop at the time of harvest is set by FDA.

If the amount of residue left on a crop by good agricultural practice is less than the safe level as is often the case, the lower level is established as the legal level of residue that may remain in or on the crop.

On the average from 300 to 2,000 different compounds must be tested for every new chemical weed killer which is found. Three to five years goes into the search. Costs range from about $700,000 per new chemical in a few cases to $1,500,000 or more in most cases.

As NACA says, in testing weed killers, nothing is left to chance.

Price Trends

Advanced
None

Reduced
Tankage, New York, Chicago, 25c. per unit-ton

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 12, 1958
110.56	110.57	110.95	110.31

For Current Prices see page 9

January 1 Price Advances

Ammonium nitrate, $1 per ton.
Ammonia, anhydrous, $2 per ton.
Nitrogen solutions, 4c. per unit-ton.
Potassium muriate, 2½c. per unit-ton.
Potassium sulfate, 3½c. per unit-ton.

Ammonia—September production of synthetic anhydrous ammonia, as reported by the Census Bureau, was 358,891 short tons. Comparable figures for August and September, 1958, were, respectively, 342,634 tons and 305,242 tons.

Stocks of synthetic anhydrous ammonia held by producers at the end of September totaled 85,470 tons, compared with the 88,368 tons on hand thirty days earlier.

Ammonia prices, unchanged since last October 1, will be seasonally adjusted the first of the year. To destinations east of the Rockies, anhydrous technical will be billed at $88 per ton, refrigeration grade at $90.50, and aqueous at $91 per ton. All advances amount to $2 per ton.

Animal Proteins—Solitary price change recorded last week was a 25 cents reduction in tankage that set prices for the material at $4.75 per unit-ton, New York, and at $5 Chicago.

Various factors, a dealer here noted, were behind this small reduction as well as the generally weak market tone that has prevailed this fall. Possibly the most significant thing, he said, was the slump in feed business that is reported in most parts of the country.

He also indicated that the feed mixers, unlike the fertilizer trade, operate on a calendar year basis which factor probably limits their buying of materials during December.

Phosphate Rock—Mine production and marketable output of phosphate rock during the 1959 crop year (July 1, 1958, thru June 30, 1960) amounted to 46,277,000 long tons, and 15,051,000 long tons, respectively. Comparable figures for the preceding year, as reported by the Bureau of Mines, were 46,135,000 and 14,688,000.

Apparent consumption of phosphate rock (quantity sold or used by producers plus imports minus exports) during the '59 crop year also increased, to 12,560,000 long tons from 11,867,000, for a six percent gain.

Florida and the Western States (Idaho, Montana and Wyoming) both set records in the total phosphate rock sold or used. According to the Mines bureau, each was 7 percent above the previous year. Tennessee, however, was down 2 percent.

Exports totaled 2,958,000 long tons for the 1959 crop year, up from 2,751,000 in '58.

Total stocks held by producers as of June 30, 1959 were 3,327,000 long tons. The same date a year earlier, stocks measured 3,666,000.

Agricultural usage of phosphate rock during the '59 crop year amounted to 8,210,000 long tons (P_2O_5 content 2,708,000 long tons). And of this amount, 4,227,000 long tons went into ordinary superphosphate; 2,944,000 into triple superphosphate; 707,000 for direct application to soil; 315,000 into stock and poultry feed, and 17,000 into other applications.

For the 1958 crop year, agricultural usage, totaling 7,506,000 long tons (P_2O_5 content 2,490,000) was broken down as follows: ordinary superphosphate 4,451,000; triple superphosphate 2,015,000; direct application to soil 659,000; stock and poultry feed 287,000, and other 4,000.

Farm Chemicals Imports: October

Following are data compiled by the Census bureau indicating volume of imports of agricultural chemicals for September and October, 1959. Classified as ammonium nitrate mixtures are those containing 20 percent or more nitrogen. Figures for ammonium phosphates and fishmeal and scrap account only for that material intended for use as fertilizer. All figures are in short tons.

	October	*September*
Ammonium nitrate (includes mixtures)	10,315	24,425
Ammonium phosphate	20,270	25,473
Ammonium sulfate	13,475	21,834
Calcium cyanamide	3,068	13,482
Castor bean pomace	2,219	548
Dried blood	546	550
Fishmeal and scrap	559	1,625
Guano	36	30,164
Peatmoss (fert. grade)	13,420	26,595
Phosphate rock	7,441	12,967
Potassium chloride, crude	14,474	59,086
Potassium nitrate, crude	110	0
Potassium sulfate, crude	954	17,428
Sodium nitrate, crude and refined	25,933	67,118
Urea	4,316	3,737

Aliphatic Organics

A producer announced a ½ cent per pound across the board advance in the price of n-butyl alcohol to be effective January 1. The increase will bring the tankcar quotation up to 15½ cents per pound, while carload will be 18 cents per pound and less carload 19½ cents per pound. Otherwise, producers held the price line in aliphatic chemicals markets. Threat of a rail strike at the close of the year may lead some consumers to build inventories rather than reduce them, observers say. Although there remain a couple of weak spots in the solvents picture, due to shortage of phthalic anhydride, these markets exhibit good overall tone, it is said.

A producer announced an expansion in facilities to produce polybutadiene rubber at Borger, Texas. The expansion is expected to be complete by August of 1960 and will bring the plant's capacity up to 20,000 long tons per year. Butadiene for production at the new plant will be provided by the company's adjacent butadiene plant at Borger, the company said.

Snythetic rubber production in October amounted to 128,532 long tons, according to report of Bureau of Census. The figure compares with 119,847 tons in the previous month and 100,981 long tons in the corresponding month of last year.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 12, 1958
132.95	132.95	132.95	130.73

For Current Prices see page **9**

January 1 Price Advances

n-Butyl alcohol, ½c. per lb.

A producer will build a new plant for the production of polypropylene. The unit will be designed to turn out 20 million pounds of polypropylene and is expected to be on stream in the fourth quarter of next year. The company, which has been making material in semi-commercial quantity at Longview, Texas, says the new unit is not an expansion of the pilot plant operation.

"Delrin" acetal resin, based wholly on formaldehyde and marketed for the first time this year, is reported being used by a Chicago firm in making flat-top conveyor chains molded from the material. Initial production of the resin has been estimated at about twelve million pounds per year.

Acetone—Volume to solvent use remains fairly well maintained, sources say. Stocks of acetone are fully adequate for trading requirements. Price is unchanged at levels of long standing in the trade.

The general feeling is that the prolonged steel strike has not hurt the business upsurge which began to make itself felt in late 1958. If anything, a "boom" period has only been put off for awhile. Nevertheless, here again, chemicals salesmen say that a settlement of the strike during the injunction period wou'd do much to take the pressure off and give the industry a chance to evaluate next year's potential more accurately.

Acrylonitrile—The plans of a major consumer to get into the acrylonitrile field, and produce for its captive needs is expected to keep the market in oversupply for the next few years. However, textile and synthetic rubber needs remain on the upgrade. Price is 26.49c. per pound in tankcar quantity.

Butadiene—A producer will expand production of polybutadiene rubber at Borger, Texas to 20,000 tons per year. The expansion is expected to be complete by late summer of next year. Butadiene for the new unit will be provided by the firm's adjacent butadiene plant at Borger, the company said.

n-Butyl Alcohol—A producer announced a ½c. per pound across the board advance in the price of n-butyl alcohol, effective January 1, 1960.

Under new schedules tankcar price will be 15½c. per pound; carload of drums, 18c. per pound; less carload drum lots, 19½c. per pound. Prices are quoted on a delivered basis.

As with the last change in this market (½c. per pound advance in July of this year) butyl acetate remained unchanged. Previous to this a change in the alcohol price had meant a change in acetate price also.

Capryl Alcohol—Sources report prices unchanged on sec-capryl alcohol, 92 to 99 percent. This material lists at 19½c. per pound in tanks, 22c. per pound in carload of drums and 23c. per pound in less carload drum lots.

Dibutyl Sebacate—Listing is unchanged. Sources report tankcar price at 61c. per pound; carload of drums, 63c. per pound.

Ethylene Glycol—Unseasonally warm weather in some parts of the country is reported to have put a damper on some suppliers' hopes for a heavy volume of re-order business from antifreeze dealers after the first of the year.

Production is fully adequate to supply current needs. Prices were unchanged and sources see little chance of a change in the near future. However, in place capacity plus expansions could combine to force prices down.

Ethylene Oxide—The cost-price squeeze is perhaps most sharply felt in large volume aliphatics markets such as this one. For example, the tankcar price of ethylene oxide has advanced ½c. from 15c. to 15½c. per pound since 1955. During the same period, costs of handling, labor and freight rates have gone up many times over. Despite the fact that profit margins are under pressure of this sort, trade sources feel an advance in price is unlikely. Capacity to produce exceeds market demand by better than 20 percent, it is said.

Formaldehyde—Sources report volume is a little less than expected but sales have

Aliphatics Foreign Trade: October

Exports and imports of selected industrial aliphatic organics for the months of September and October, 1959, as reported by the Bureau of Census were as follows:

		October	September
EXPORTS			
Acetone	lbs.	766,176	825,957
Butyl acetate	lbs.	965,160	818,789
Butyl alcohol	lbs.	2,065,953	6,107,341
Ethyl alcohol and methylated spirits	gals.	990	123,112
Ethylene Glycol	lbs.	11,481,989	15,867,024
Glycerine, crude and refined	lbs.	922,160	2,836,606
Methyl alcohol	gals.	1,913,262	975,162
Methyl ethyl ketone and methyl acetone	lbs.	490,627	381,219
Propyl alcohol	lbs.	1,921,654	2,156,629
IMPORTS			
Acetic acid (over 65 percent)	lbs.	0	35,800
Acetic anhydride	lbs.	79,150	151,810
Amyl alcohol and fusel oil	lbs.	56,841	0
Chloroacetic acid (mono and tri)	lbs.	1,085,949	1,039,730
Formic acid	lbs.	214,223	209,719
Glycerine, crude	lbs.	1,139,209	1,114,771
Lactic acid (55 percent or more by weight)	lbs.	45,198	0
Trichloroethylene	lbs.	3,965,280	4,888,857
Vinyl acetate, unpolymerized	lbs.	5,083,430	3,436,800
Vinyl alcohol, including derivatives	lbs.	1,162,510	2,381,796

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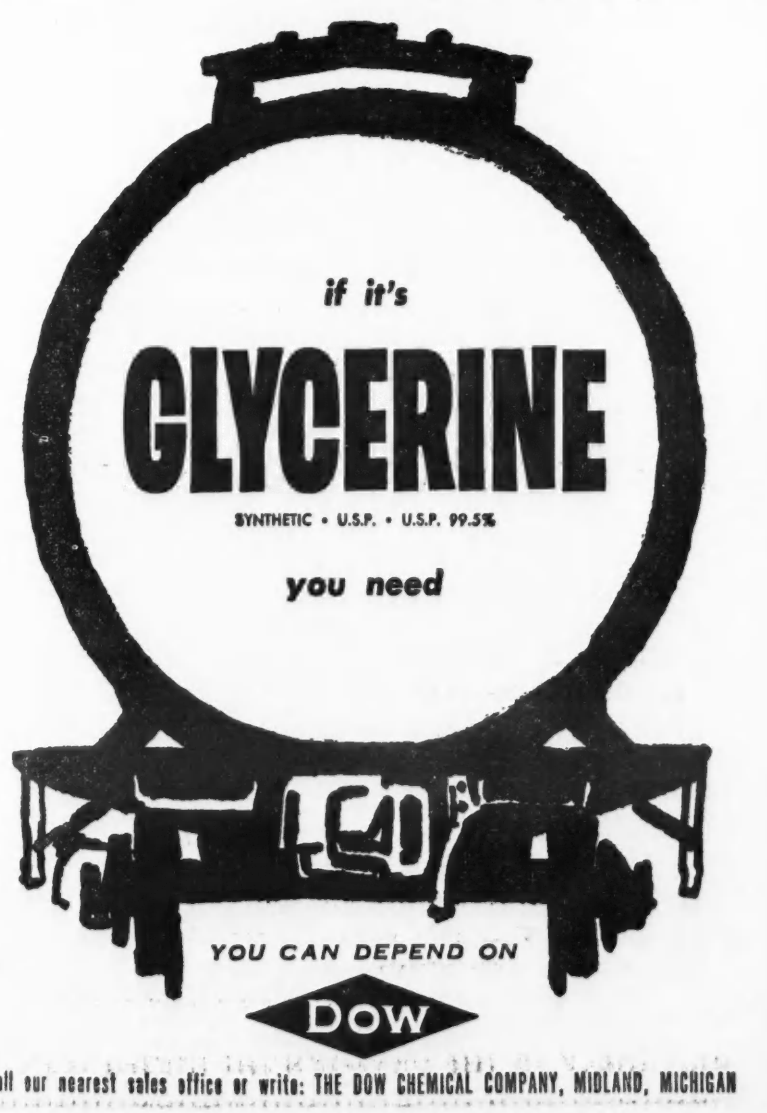
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Aliphatic Organics

held up fairly well. Supplies of formaldehyde and derivatives are adequate for trade requirements. Sources report prices steady and unchanged from previous report.

"Delrin" acetal resin, based on formaldehyde, is reported being used by a Chicago firm in producing flat-top chain conveyors. Such an application is favored by the fact that the new resin is reported 20 percent lighter than aluminum. "Delrin," newly marketed in recent months, is expected to have initial production of about 12 million pounds per year.

Glycerine—Stocks gained somewhat in the month of October, according to report of the American Soap and Glycerine Producers. At the beginning of October stocks stood at 48,400,000 pounds and at the end of the month were 51,500,000 pounds. Adjusting for crude production, imports and exports, the disappearance of 22,400,000 pounds represented a gain in production over disappearance of 3,100,000 pounds. At the end of October last year, stocks were 58,000,000 pounds.

Glycerine disappearance for the first ten months of the year totaled 218,100,000 pounds as compared with a disappearance of 196,000,000 pounds in the corresponding period of last year.

Methanol—Capacity remains fully adequate for trade requirements, sources report. Formaldehyde consumption has been well maintained, although a little less than producers had expected that it would be.

Methanol prices are unchanged at previous levels and sources see no indication of any changes in the offing. This is another of the large volume markets which are pressured by a cost squeeze. And with substantial expansions currently in the works the prospect is for more of the same, observers point out.

Trend in recent years has been toward a growing captive use. In some quarters, captive use last year is estimated to have amounted to more than half of production. This has come about through the tendency of major producers toward vertical integration.

Molasses—Markets for feeding cane molasses remained steady. Moderate demand was recorded in midwest and Gulf states, but unseasonably slow on the east coast. New Orleans prices improved slightly, the Department of Agriculture noted, and "mostly" price was 10c. per gallon. Chicago prices were unchanged to ¼c. per gallon higher, while other leading distribution points held listings unchanged.

Louisiana sugar mills ground 3,099,705 tons of cane through the end of November. Trade reports indicate that some mills

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Aliphatic Organics

will continue grinding through the third week of December and possibly into the fourth.

Cuban exports of blackstrap from January 1 through September 15 of this year were 60 million gallons. US firms bought 2.2 million gallons of hi-test molasses for the production of antibiotics.

Of the '59 crop, 181.4 million gallons were assigned for local use as against 74 million gallons last year. The largest increase in assignment of molasses for local use was for the manufacture of absolute alcohol. Cuba is again requiring that alcohol be mixed with gasoline for auto fuel at the rate of 15 to 18 percent.

Interest in molasses for cattle feeding is on the increase. The quota for this end-use was raised from 7 million gallons last year to 11.5 million in 1959.

Paraformaldehyde — Withdrawals for resins use remains steady. Price schedules are unchanged at 10c. per pound for flake material, 91 percent, bags, c.l., frt. alld. Price in less carload ranges from 12c. to 13c. per pound.

Perchlorethylene—Demand in the dry cleaning field continues to hold up well. Perchlorethylene has come into increasing use in this outlet due to the fact that it is less toxic than carbon tet, is not flammable and has low viscosity and low surface tension, which enhance its solvent power.

Material is available in tankcar or tanktruck in four, eight or ten thousand gallon quantities as well as carload or less carload of 55-gallon drums.

Dry cleaning and industrial grade (used for metal degreasing), are available, differing slightly in the amount of stabilizer used in each.

Total output of perchlorethylene last year, according to Tariff Commission figures, was approximately 188 million pounds. Production in the first eight months of this year amounted to 137 million pounds as against 115.4 million for the eight-month period in 1958.

Sebacic Acid—Purified acid is 65½c. per pound, bags, carload, works basis. Less carload is 2c. more at 67½c. per pound. Prices on CP material are 69½c. per pound, bags, carload, same basis, and 71½c. per pound in less carload quantity.

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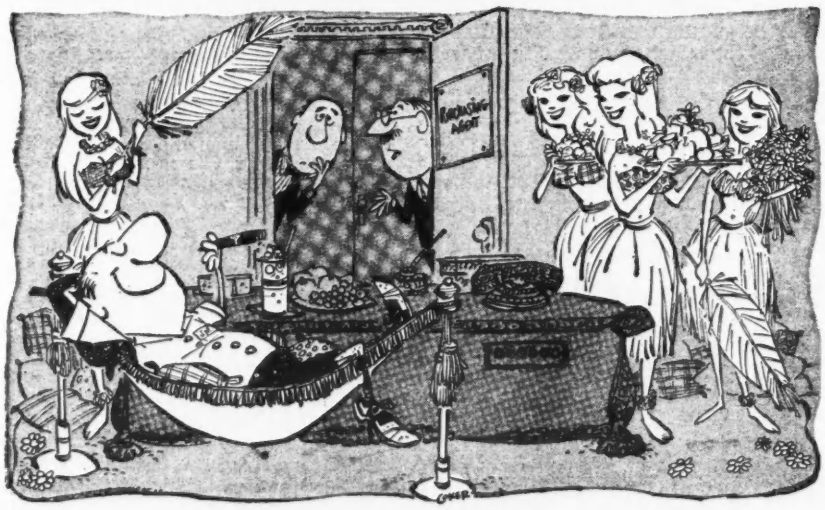

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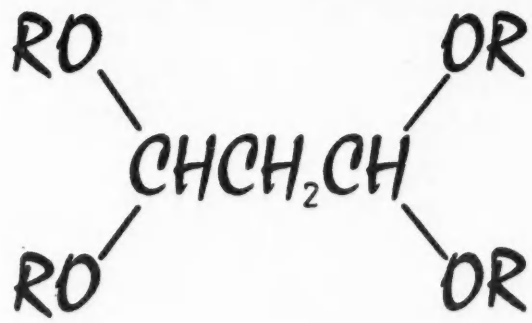

suggestions cross-linking agent; insolubilizing agent; substituted pyrimidine building block; usual dialdehyde reactions; pyrazole intermediate

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COAL CHEMICALS

Coal Chemicals

The coaltar industry met the advance in benzene reported two weeks ago by petroleum sources. Effective January 1, major cokeoven operators will increase the price of benzene 3 cents to 34 cents per gallon, tanks, f.o.b., works. Last previous change in the market was a 5 cent per gallon drop in July, 1958. The long steel strike led to a short supply of benzene due to the inability of petroleum capacity to supply the entire industry. However, cokeoven material plus petroleum benzene and imports are felt to be more than sufficient to supply the market. Thus, if the steel strike is settled and cokeovens operate at capacity in the coming months, oversupply may again be a problem by July, 1960.

A number of January 1 price advances were reported in intermediates markets. Among chemicals to be increased are: p-phenylenediamine, 15 cents per pound; m-nitrotoluene, 5 cents per pound; m-toluidine, 4 cents per pound. A producer announced an 11 cent per pound increase on technical 2,6-di-tert-butyl-p-cresol, effective at the first of the year. The same firm said it would raise feed and food grade material 10 cents per pound. Other producers had the matter under study.

January 1 Price Changes

Advances

Benzene, tanks, 3c. per gal.
4-Chloro-2-nitroaniline, tech., dms., 6c. per lb.
m-Nitrotoluene, 5c. per lb.
p-Phenylenediamine, 15c. per lb.
m-Toluidine, 4c. per lb.

Declines

Fumaric acid, c.l., t.l., 4½c. per lb.
l.c.l., l.t.l., 4c. per lb.
Maleic anhydride, t.c., c.l., t.l., 5¼c. per lb.
l.c.l., l.t.l., 4¾c. per lb.

A producer announced advances for ten of the firm's dispersed dyes for synthetic textile fibers. The advances range from 4 cents to 29 cents per pound and are to be effective January 1.

Production of steel was expected to exceed the previous high achieved last April when consumers were stocking steel in preparation for the strike. The American Iron and Steel Institute estimated that steel production in the week ended December 13 would amount to 94.3 percent of theoretical capacity equivalent to 2,671,000 net tons of steel. Output in the week previous was 2,650,000 tons, 1,291,000 in the comparable week one month ago and 1,985,000 net tons in the corresponding week one year ago.

Basic Products

Benzene—The coaltar industry met the advance in benzene reported two weeks ago by petroleum sources. Effective January 1, 1960, cokeoven material will be priced at 34c. per gallon, tanks, f.o.b., works.

The long steel strike and heavy pre-strike hedge buying has seen benzene move from a position of oversupply to one of very short supply. Although large quantities of petroleum material have been turned out, they have not been sufficient to supply the multi-million gallon needs of the market. However, it is pointed out that should the steel strike be settled and cokeovens operate at capacity in the months ahead, oversupply may be a problem again by the middle of '60.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 12, 1958
118.45	118.45	118.45	118.49

For Current Prices see page 9

Census Bureau reported imports of benzene in the month of October amounted to 9,120,878 gallons. A breakdown of imports shows 6,923,016 gallons from Russia, 917,745 gallons from France, 687,948 from Poland, 580,140 from Czechoslovakia, and 12,090 gallons from Canada.

Benzene output in September was erroneously reported in this space two weeks ago. Tariff Commission figures for September show output by tar distillers of 1,081,147 gallons; petroleum processors, 16,010,224 gallons; cokeoven operators, 2,317,680: total for the month, 19,409,051 gallons.

Naphthalene—The market remains in a tight supply situation. With steel companies again able to ship naphthalene from cokeovens, the most pressing needs for phthalic anhydride are being cared for.

However, a tight supply position on naphthalene is forecast for the whole of next year and, with labor difficulties still unsettled in the steel industry, consumers are pressing for material.

Imports are minimal. Census Bureau figures indicate that October imports amounted to only about 25 percent of the more than 12 million pounds received during the comparable month last year.

Dyes

Direct Black—September production of direct black (C. I. 30235) amounted to 534,648 pounds as against 358,882 pounds in the previous month. Output in the first nine months of this year was 4,653,907 pounds as compared with a total production last year of 4.5 million pounds.

Vat Jade Green—Output for September of vat jade green (C. I. 59825) totaled 268,421 pounds as against 272,616 pounds in the previous month. Production in the first nine months of this year amounted to 2,168,531 pounds as compared with a total production last year of 2.5 million pounds.

Intermediates

4-Chloro-2-nitroaniline—As previously reported, the price for this product will be increased from 80c. to 86c. per pound in drum quantity. Price on the west coast is 2c. per pound more.

2,6-Di-tert-butyl-p-cresol—A producer announced an advance in technical and food and feed grade material to be effective January 1, 1960.

Under new schedules, technical material will be 68c. per pound in carload or

Aromatics Foreign Trade: October

Following statistics are compiled from Census bureau reports. Units used by the bureau are retained in all cases. Attention is called to the fact that exports of toluene are reported in pounds while imports of ADF cresylic acid and cresols are in gallons. Imports of dutiable cresols and cresylic acid are listed in pounds.

		October 1959	*October 1958*	*First Ten Months 1959*	*First Ten Months 1958*
EXPORTS					
Benzene	gals.	1,456,797	2,879,247	6,558,236	8,498,620
Coaltar, crude and refined	gals.	40,099	100,722	237,341	469,376
Creosote or dead oil	gals.	32,448	15,023	257,466	400,370
Cresols and cresylic acids	lbs.	150,119	538,803	6,040,728	6,355,154
Phenol	lbs.	2,675,720	3,285,390	33,580,555	32,769,757
Phthalic anhydride	lbs.	19,320	398,040	4,055,120	15,154,968
Pitch	short tons	1,550	2,849	25,008	58,703
Toluene	lbs.	12,262,036	25,356,385	164,713,649	149,531,389
IMPORTS					
Benzene	gals.	9,120,878	3,859,244	51,238,852	44,545,091
Creosote and dead oil	gals.	1,410,590	2,307,508	32,557,667	27,976,642
Cresols and cresylic acid, ADF	gals.	120,692	108,432	1,746,546	1,018,467
Naphthalene, melting point less than 79° C.	lbs.	3,047,567	12,260,513	51,592,959	62,231,057
Melting point 79° C and over	lbs.	4,060	147,378	379,214	1,002,552

Coal Chemicals

truckload lots and 71c. per pound in less carload lots. The change is an 11c. per pound boost for technical grade.

Food or feed grade will be advanced 10c. per pound to 78c. in less than carload quantity.

Other producers reported prices unchanged from previous listing. Technical grade is currently 57c. per pound in carload or truckload and 60c. per pound in less than carload quantity. Feed or food grade is 65c. per pound in carload and 68c. per pound in less than carload lots.

N,N-Diethyl-m-toluidine—Effective January 1, price of technical material will be advanced 3c. per pound across the board.

Under new schedules, tankcar price will be 86c. per pound; carload or truckload, 87c. per pound and less carload lots, 88c. per pound.

N-Ethyl-N-benzyl-m-toluidine — Technical material will be raised 5c. per pound in drum quantity to $1.14 per pound. New price is effective January 1.

N-Ethyl-m-toluidine — Technical material will be boosted 4c. per pound across the board, effective January 1.

Under new schedules, tankcar price will be 87c. per pound, carload or truckload, 88c. per pound and less carload quantities, 89c. per pound.

Maleic Anhydride—Producers report little change in the tight supply position which has been in effect in this market for many months. Fumaric acid, trans isomer of maleic, is in the same spot.

Consumers are faced with the unusual situation of a price reduction announced in both these markets many weeks in advance of the actual price change. Ordinarily, such a move would prompt buyers to reduce inventories to a minimum and buy only hand to mouth quantities.

With both these materials in short supply, however, consumers are taking all they can get under contracts and paying premium prices for spot lots, it is reported.

m-Nitrotoluene—Price in drum quantity will be increased 5c. to 50c. per pound, effective January 1.

p-Phenylenediamine — Market will advance 15c. per pound, effective January 4, 1960. New price on technical material will be $1.55 per pound while refined grade will be 2c. per pound more at $1.57 per pound.

Phthalic Anhydride — Producers were supplying the most pressing market needs. It is estimated that full production should be attained by the end of the year, but phthalic will probably be tight until well into the first quarter of the year.

A survey of the Chemical Buyers Group of the National Association of Purchasing Agent indicated that 72 percent off PA's polled think phthalic anhydride will increase in price during the first quarter of 1960. This compares with 33 percent who thought the price would go up during the current quarter.

Italy and West Germany supplied the bulk of phthalic anhydride imports during October. Following is the breakdown of imports for the month reported by the Census Bureau.

Country	*Pounds*	*Dollar Value*
W. Germany	985,590	$163,360
Italy	981,124	165,007
France	606,625	102,029
Canada	316,830	62,667
Belgium	198,414	33,584
Switzerland	22,046	3,748
Total	3,110,269	$530,395

Styrene Monomer—The effect of a 3c. per gallon increase in the price of benzene is not expected to be felt immediately in this market. As escalation contracts are set up it would be about July before the increased cost would be reflected in styrene monomer, sources point out.

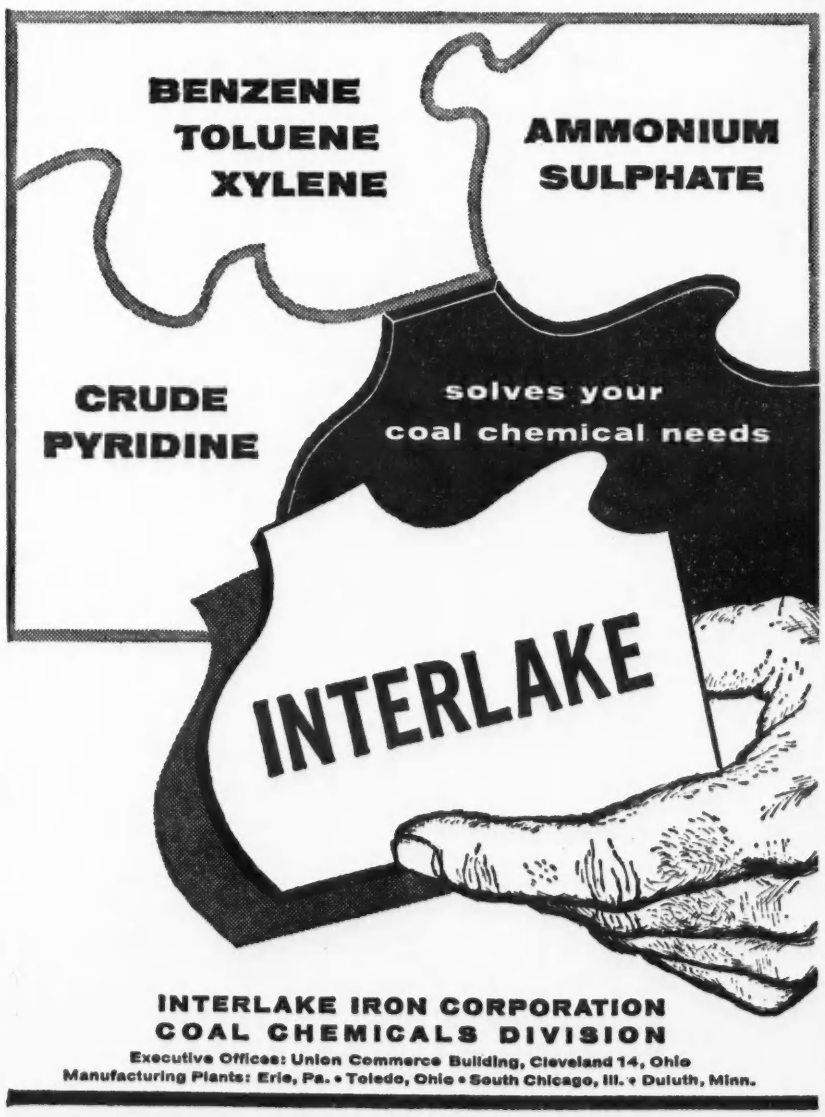
m-Toluidine—Market will be advanced 4c. per pound across the board effective January 1.

Under new schedules, tankcar price will be 82c. per pound, carload or truckload, 83c. per pound and less carload quantity 84c. per pound.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended December 13, was as follows:

Ammonia liquor	lbs.	947,174
Ammonium sulfate	lbs.	40,246,616
Benzene	gals.	3,705,613
Coaltar	gals.	22,007,657
Crude chemical oil	gals.	697,918
Toluene	gals.	897,323
Xylene	gals.	265,873



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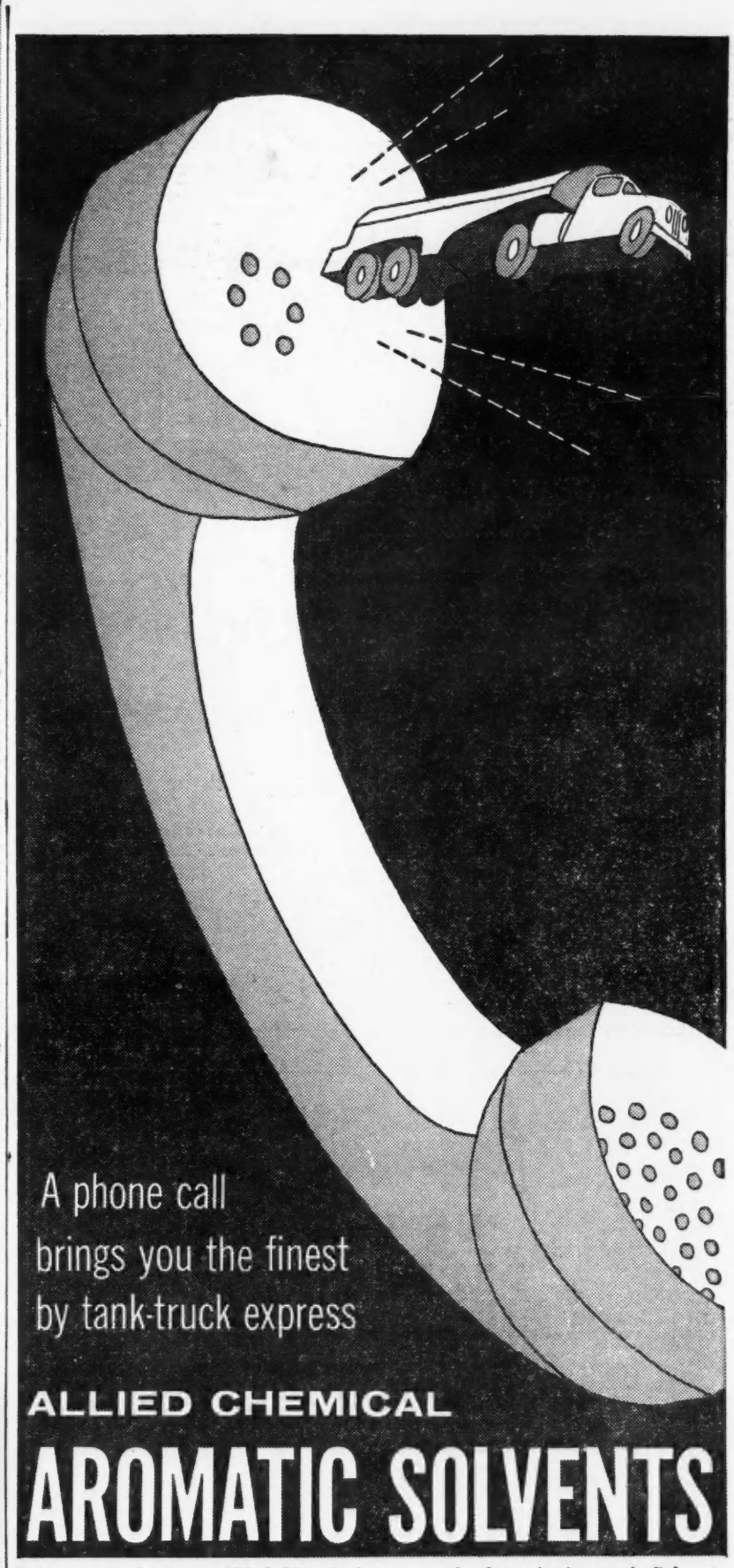

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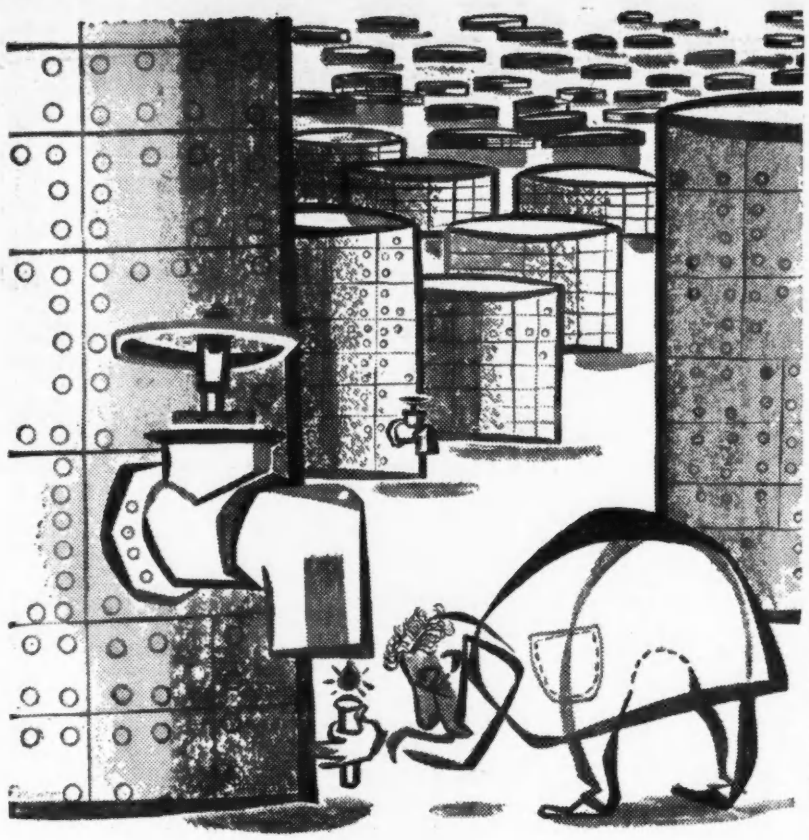

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Data Offered

Allied Chemical Corporation's Solvay Process Division has issued a new technical bulletin on **hydrogen peroxide**, available from divisional headquarters at 61 Broadway, New York 6, N. Y. The sixty-three page booklet gives practical information on properties of hydrogen peroxide and its water solutions, as well as information on handling, dilution and storage.

J. T. Baker Chemical Company has available from its Phillipsburg, N. J., office, data on four newly-developed high-purity, finely-divided **alpha and gamma aluminas**. Development samples from pilot plant production are also offered.

Pfister Chemical Works, Inc., has published a new product list superceding the list published two years ago. Copies of **"Pfister Organic Intermediate Chemicals"** are available from the company's Ridgefield, N. J., office. This revised listing reflects changes that have been made in Pfister's line of organic intermediates since publication of the first edition. Most of the compounds listed are available in either research or pilot plant quantities. Many are regularly produced on a commercial scale.

Chicago-Nuclear Offers New Carbon Compounds

Nuclear-Chicago Corporation, Des Plaines, Ill., has added two new radioactive carbon-14 compounds to its list of commercially available carbon-labelled materials.

The new compounds are adenosine-8-C14 and a-amino isobutyric-1-C14. The first is said to have important applications in chemicals and related end-uses. The latter is recommended for the study of proteins.

Monsanto Adds to Line Of Ethylene Condensates

Monsanto Chemical Company's inorganic chemicals division has expanded its line of nonionic surface active agents by addition of alkyl phenol-based ethylene oxide condensates.

The St. Louis, Mo., firm already markets alcohol- and mercaptan-based nonionics and is reported to be the leading producer of tall oil-thylene oxide condensates.

Interim production of the dodecyl phenol and nonyl phenol-based products is already underway at the company's Kearny, N.J., and Everett, Mass., plants. Commercial production is scheduled for February of next year at Kearny and Trenton, Mich.

The new products, which will be marketed as a part of the company's "Sterox" line, offer combinations of properties not previously available to the industry, Monsanto says.

Bids Wanted

Albumin, normal human serum USP, 172,800, Bid RFP 5770Q, Dec. 18, Military Medical Supply Agency, 29th St. and 3rd Ave., Brooklyn, N. Y.

Drugs, Isoniazid tablets, USP, 9,000 bots.; Prednisone tablets USP, 100S, 432 bots.; Prednisolone tablets USP, 50S, 332 bots.; Prednisolone tablets USP, 134 bots.; Prednisolone tablets USP, 100S, 648 bots.; Prednisolone tablets USP, 1000S, L56 bots.; Bid IFB M5-4060, Dec. 15, Marketing Division for Drugs and Chemicals, VA Supply Depot, Somerville, N. J.

Endrin, 5 metric tons, 19.2 percent emulsifiable, estimated value $14,000, January 8; dieldrin, 7.5 metric tons 50 percent wettable powder, estimated value $20,000, Jan. 15, National Tobacco Board, 9 Amerikis Street, Athens.

Hydrogen Peroxide, bulk; **Formic Acid,** bulk; **Sodium Acetate,** bulk; **Caustic Soda,** bulk; **Activated Carbon,** bulk, Bid RM 017092, Dec. 31, M.F.M.Y. Industries, Ltd., Marriot Road, Karachi, Pakistan.

Potassium Chloride, 30 tons, Amorphous Phosphorus, 3 tons; Gelatin, 7 tons; Antimony Sulfide, 6 tons; Manganese Dioxide (black), 3 tons; Manganese Dioxide (red), 5 tons; Sulfur powder, 8 tons, Bid RM-019015, Dec. 29, The Bacca Match Factory, 22 Imamganj, Dacca, East Pakistan.

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Trade Name Chemicals & Specialties

Biggest gains in the synthetic adhesives market this year will be in the phenolics, used in thermal insulation, plywood, friction materials, and reinforced plastic laminates. This group is predicted to account for over half of the synthetic adhesives market. Vinyls are expected to increase by 30 percent, reflecting progress in the packaging industry; and urea and melamine resins will be up 10 percent. These find use in plywood and plastic laminates. Other groups which are still on the lower side of synthetic adhesives sales are copolymers and epoxy bonding agents.

Copolymers should grow in importance as they permit more precise combinations of polymers having better control over end properties than found with blends. Also, formulators are finding that in some cases, it is better and simpler to use a single copolymer instead of a blend of two separate resins. Epoxies are also said to have potential. Blends of epoxies and elastomers can give good metal-to-metal bonds under heavy working conditions, they can be applied to provide non-skid surfaces, and for repair work of all varieties. Other outlets for this market are the automobile, aircraft and electronics industries.

Discussed below under antibacterials is a new preservative in pigment foam to insure cleaner, longer-lasting paints. Several of the advantages for this new product have been listed as follows: better control over the disfigurement of paint films by mold and resulting dirt; decreased impairment to films as a result of molds and bacteria; and retardation and check of chalking rate.

WHAT'S REPORTED ON HERE

Though coverage in the Trade Name Chemicals & Specialties market report encompasses twenty classes of chemicals, only a few of them are mentioned in this issue. Here's the entire list:

Adhesives, antibacterials and fungicides, antifoaming agents, antioxidants, antistatic agents, blowing agents, catalysts and accelerators, chelating agents, chemically processed oils, emulsions and latexes, enzymes, fatty acid derivatives, feed supplements, filtering materials, ion exchange resins, surfactants, synthetic waxes, textile chemicals, thickening and suspending agents, and ultraviolet absorbers.

If you have suggestions for any additional materials that might be included in this section, write OIL, PAINT AND DRUG REPORTER'S Technical Editor, 30 Church street, New York 7.

Adhesives

Borden Chemical Company, a division of Borden Company, has on the market a new non-flammable waterproof adhesive for such purposes as bonding rubber and vinyl tile to on-grade concrete, linoleum to steel, terrazzo, ceramic tile, and other non-pourous surfaces. Trade named **"Cure-Set,"** Borden also recommends it for bonding metal stair nosings, trim, trackless carpet strips and other floor accessories.

Described as being a two-component system for cold applications, Borden says that **"Cure-Set"** has a working life of approximately 30 minutes and a full setting time of about 24 hours. Available in both liquid and powder form, Borden explains that **"Cure-Set"** adhesive comes ready to use and features a long storage life.

Borden also has on the market a line of polyvinyl acetate resin adhesives. Trade named **"Cascorez CV-765"** and **"Cascorez CV-771,"** they are said to be ready to use polyvinyl acetate adhesive formulations having such characteristics as excellent storage stability, good tolerance for low temperature and high humidity gluing conditions, and improved dry strength.

Further properties listed by Borden for **"Cascorez CV-765"** and **"Cascorez CV-771"** are their good filling action on rough surfaces, and the fact that they form a flexible bond which does not crystallize or become brittle, and they are said to be available in a range of solids.

Another Borden product is **"Vinylac 978-50."** The company describes the material as being a resinous modifier for the tough, thermoplastic film deposited by the polyvinyl acetate adhesive system.

Compatible with polyvinyl acetate films, Borden states that **"Vinylac 978-50"** imparts such properties as immediate or delayed tack; extremely fast grab; aggressive adhesion; water resistance; and increased emulsion viscosity.

A. B. F. Goodrich adhesive is **"Plastilock 604,"** a solvent type Hycar rubber adhesive forming a fairly flexible bond. Tan in color, **"Plastilock 604"** is a thin syrup in viscosity, has a total solids content of 33 percent, specific gravity of 0.90, ketone odor and solvent and its thinner is methyl ethyl ketone.

According to Goodrich, **"Plastilock 604"** has good resistance to chemicals and high temperatures when heat cured. It also has good water resistance. **"Plastilock 604,"** continues Goodrich, has many applications. It can be used as a brush grade adhesive for bonding friction materials, phenolic laminate and nitrile rubber to metals, metal to metal and extremely smooth surfaces to themselves.

Concerning curing methods of **"Plastilock 604,"** Goodrich states that their product is both air drying and heat curing. It can be cured under such types of heat as oven cure, press cure, dielectric and induction.

Another Hycar resin adhesive manufactured by Goodrich is **"Plastilock 601."** This is described as being a heat curing, thermo-setting, film form adhesive. It too, like **"Plastilock 604,"** has good heat and chemical resistance and structural stability.

Other properties of **"Plastilock 601"** listed by Goodrich include the fact that it does not require drying time as with solvent and emulsion type cements. Furthermore, just heat and pressure are needed to accomplish a strong bond.

"Plastilock 601" is suggested for use where outstanding structural stability is needed such as bonding most ferrous and non-ferrous metals to themselves, plastics to glass, steel to wood, cloth to steel on itself.

Antibacterials & Fungicides

Buckman Laboratories, Inc., markets a preservative pigment trade named **"Busan 11."** This is barium metaborate monohydrate and in appearance is white and crystalline. **"Busan 11"** is prepared by precipitation from aqueous solution.

According to Buckman, **"Busan 11"** is useful for: controlling disfigurement of paint films by mold and associated dirt; controlling deterioration of paint films caused by fungus and bacteria; delaying the incidence of chalking and retarding the chalking rate, particularly of zinc-free paints; and decreasing the yellowing tendency of paint films containing rutile titanium dioxide and calcium carbonate and increasing their durability.

Adding details to the above-mentioned properties, Buckman says that work with pigment systems containing **"Busan 11"** gives a lower oil absorption than might be expected from the oil absorption of the material alone. Thus, the oil absorption for **"Busan 11"** is not necessarily of **"Busan 11"** alone. Specific gravity of **"Busan 11"** is about 3.4, equivalent to a weight per gallon of 28.3 pounds.

Concerning suggested concentrations of **"Busan 11"** for various applications, Buckman recommends that to control growth of microorganisms on and in zinc-free paint films with 50 percent or more of the extender pigment as calcium carbonate and alkyd or linseed oil vehicle is 1.5 to 2.0 lb. per gallon.

Another feature of **"Busan 11"** is the fact that, in general, paints containing adequate amounts of this material stay cleaner, are freer from excess chalking, and are failing gradually by uniform erosion. The company further states that decreased cracking was observed for paint containing calcium carbonate as the major part of the extender.

Buckman suggests that for paints most conductive to microorganism growth, it is better that both undercoat and topcoat be preserved. Finally, the inclusion of **"Busan 11"**, states the company, in paints containing rutile titanium dioxide and calcium carbonate increases whiteness

—*Continued on page 62*

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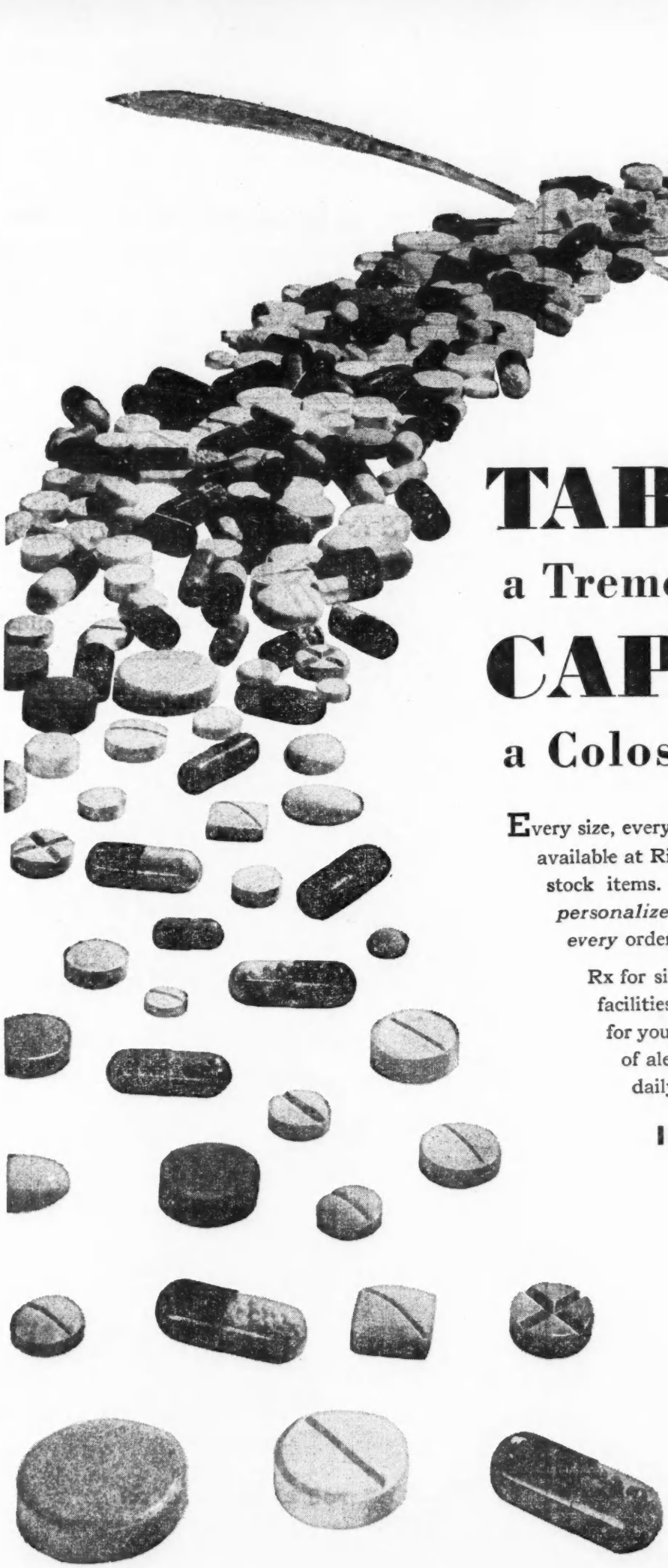

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Drugs, Fine Chemicals

Estes Kefauver, two-time ill-fated pursuer of the Democratic Presidential nomination, and his senate subcommittee lieutenants lit into the drug industry last week, charging it with exorbitant profits and prices. At the start, the government investigators stole the show and the daily headlines. But on Wednesday (December 9), the industry took the offensive and scored. In command was the president of a leading US drug firm. After first rebuffing a series of hostile questions, he pointed out that unless the senate committee took care it could easily upset the delicate balance the industry has developed over the years between the "quest for scientific knowledge on the one hand and the drive for financial success on the other."

Replying to charges of excessive profits on certain hormone drugs, the well-known company president said that the firm's profits on these items over the last ten years had been 13.8 percent, after taxes. He noted also that the subcommittee's analysis of the cost of producing prednisone must have been based on those of a "mythical company," because it did not take into account his own firm's bill for research, distribution, administration and taxes—all of which are significant factors in marketing a drug or anything else for that matter.

The industry's offensive maneuver last week was not confined solely to the Washington front, however. In New York, the Pharmaceutical Manufacturers Association also swung into action. Addressing about 400 representatives of the nation's pharmaceutical companies at their annual eastern regional meeting, the PMA president suggested that the industry had become a whipping boy for those who advocate socialized medicine. He added that it was ironical "that the industry should be criticized for the financial plight of millions whose lives have been saved because of its contributions to medicine." He was referring here to old people, the group who have supposedly demanded the Kefauver investigation.

The PMA official noted that the industry as a whole will spend about $194 million researching new medicines this year. But unless fate is especially kind, it's readily apparent that a goodly percentage of this sum will be money down the drain.

Last year, reportedly, the industry's laboratories worked with 114,000 different chemical substances, of which 1,900 showed enough promise for clinical testing. But of these, less than forty will ever become prescription drugs.

Ascorbic Acid—An explosion of an ascorbic acid manufacturing plant in Italy has lessened availability of material here, it's said. This, of course, is only a temporary situation and a resumption of normal shipments from Italy is likely in coming weeks.

Also, according to recent reports, imports of ascorbic from Japan have dropped off of late. This was said to reflect the increased quantities of this and other vitamins being consumed by Japanese food and pharmaceutical makers.

Higher standards of living in Japan as well as in many other countries around the world may help to strengthen downtrending vitamin markets here, it's felt. On the one hand, imports would be minimized; on the other, US exports could be increased.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 12, 1958
60.23	60.23	60.23	62.17

For Current Prices see page 9

B-Complex—After several years of intensive investigation, a leading drug and fine chemicals maker has come up with taste-free B-complex vitamins for use in chewable tablets. Known collectively as the "Rovicote" family, there are four of these vitamins currently available to pharmaceutical manufacturers in the form of fine-dry powders—thiamine, riboflavin, pyridoxine, and niacinamide.

Caffeine—Now that the threat of a New York dock strike has been removed, there is no longer any impetus to boost prices on imported caffeine, which supplies a goodly percentage of the American market.

Imports in October were 93,470 pounds, down appreciably from September's 151,000. Suppliers in the later month included West Germany (65,000 pounds), Switzerland (11,000), The Netherlands (10,750) and The United Kingdom (6,720).

Imported material may be had for $2.02 to $2.05 per pound, duty paid, delivered, reportedly.

Cream of Tartar—October imports totaled 410,755 pounds. Sources were The United Kingdom (200,000 pounds), Spain (118,713) and Italy (92,042).

The domestic situation is pretty much unchanged. Demand is described as routine, supplies adequate. Earlier fears that shortages might be felt later this winter have been dispelled by the settling of the New York dock strike.

Mentho!—Imports of natural refined menthol in October amounted to 64,977 pounds. As usual, Brazil was the source of the largest percentage of this material —60,677 pounds.

The same month, Japan shipped 2,100 pounds here, Taiwan 1,200, and West Germany 1,000 pounds.

All of this material apparently has been pretty much sold up as dealers here report limited stocks of Brazilian menthol, and the non-availability (for all practical purposes) of Japanese goods.

Prices on the Brazilian are said to be anywhere from $6.30 to $6.75 a pound and strengthening due to an almost certain rise in replacement costs. Where available, Jap material is probably going at about $7.50 to $8 per pound.

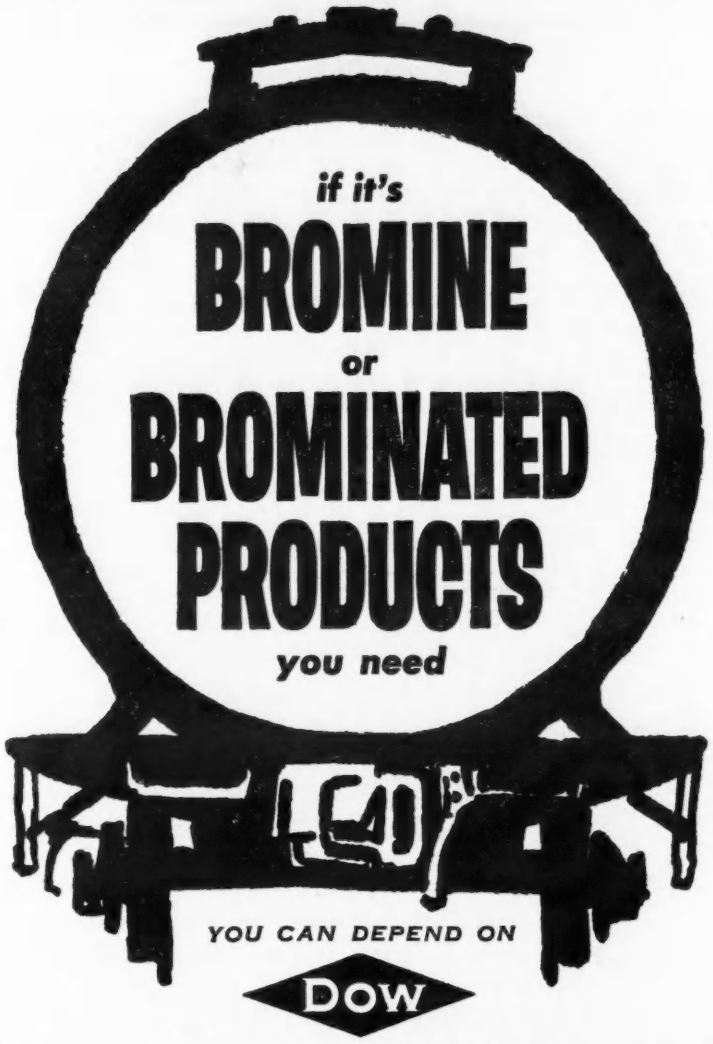
Currently, there are few if any offerings from Brazilian markets for prompt shipment. And what material is being offered is not due for delivery here before next March. The Japanese, reportedly, are offering nothing at all.

October imports of synthetic menthol totaled 1,102 pounds. France was the single source of supply. Spain may in the future become a factor in this business, however. The US Treasury department recently disclosed that it had worked out

Drugs and Fine Chemical Imports: October

Imports of selected drugs and fine chemicals for the months of September and October, 1959, as reported by the Bureau of Census, were as follows:

		October	September
Caffeine	lbs.	93,470	151,000
Camphor, crude	lbs.	0	0
Refined	lbs.	10,464	21,900
Synthetic	lbs.	7,250	0
Iodine, crude	lbs.	211,473	29,500
Menthol:			
Natural	lbs.	64,977	40,341
Synthetic	lbs.	1,102	1,102
Quinidine and salts	ozs.	72,218	113,617
Quinine sulfate	ozs.	97,019	28,082
Saccharine	lbs.	15,817	38,408
Sodium alginate	lbs.	20,500	26,020
Tartaric acid	lbs.	47,950	210,182
Theobromine	lbs.	6,000	2,000
Sterols and vitasterols:			
Animal ergin	lbs.	231	0
	lbs.	55,555	70,246



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Drugs, Fine Chemicals

an agreement with the Spanish government under the foreign assets control program whereby the latter could export synthetic menthol to the U.S.

Sketchiness of Treasury's announcement didn't give trade people much chance to evaluate this recent development. None seemed too concerned, however.

Monosodium Glutamate — One maker still adheres to the $1 per pound, single listing schedule. But as this is pretty much a contractural item, the possiblity of a price advance still exists.

The trade indicates that demands are increasing gradually from old as well as new users. No sudden boom is anticipated although expectations are that the market for this food flavor enhancing agent will continue to broaden.

Strangely enough—or is it—Chinese restaurants are big users of MSG.

Penicillin—In the past two months or so, there has been no further weakening in the penicillin market. At the same time, however, no firming trend has been apparent.

Trade sources indicate that prices range from $21 per billion units for large quantities in bulk to $25 per billion units for lesser amounts. There are indications, however, that some recent large lot trading has been conducted at below the bottom price.

Exports of bulk penicillin in October totaled 4,913,399 million units, up from 3,397,519 million units in September. The list of buyers for both amounts is too expansive to cite here, but it seems as if every country in the world bought some.

Quinine—The trade is still in the dark about the outcome of General Services Administration's sale of 13.8 million ounces of stockpiled quinine. The long lapse between receipt of bids and announcement of the purchaser's name may indicate that the government agency is having a bit of a time getting its price and terms.

Imports of quinine sulfate rose from 38,042 ounces in September to 97,019 ounces in October. Shipping here the later month were West Germany (65,855 ounces) and The Netherlands (31,164 ounces), both major factors in world quinine markets.

October imports of quinidine (and salts), however, dropped off in October compared with the preceding month. The figures: 78,218 ounces against 113,617 ounces.

Suppliers of quinidine in October were The Netherlands, shipping 46,143 ounces, and West Germany, shipping 32,055.

Sulfa Drugs—Trade sources say that sulfanilamide is still a bit short with prices of imported material, consequently, on a par with domestic levels.

Shortage developed initially as a result of the steel strike. Coal chemicals usually used in the manufacture of sulfanilamide reportedly were sacrificed to other items which brought a better profit return once shortages began to be felt. And at this point, importers stepped up shipments to the US market and were able to boost prices on their material due to the limited domestic supply.

For other of the sulfa drugs, however, adequate supplies, moderate to good demand are reported. Price-wise, there have been no significant developments.

Exports of sulfa drugs in October declined to 50,629 pounds from 68,566 pounds in September. Overall trend during the past year, however, has been toward increased foreign business.

Vitamin A—The reduction initiated by a leading producer November 27, to be effective December 1, has gone industry-wide. New schedules are based at 9½c. per million units for all liquid vitamin A products, at 13c. per million units for dry forms.

Economies resulting from increased production were said to have prompted the price decline.

Botanicals

Cascara Sagrada Bark—Prices are firm at 34c. to 36c. a pound, a range that has prevailed now for several weeks. Strength is due, reportedly, to light supplies in face of normal demands.

Goldenseal Root—Recent receipt of new crop goldenseal root by dealers here resulted in a slight price reduction. Down about 25c. per pound, current range is seen as $2.75 to $3.00.

Dealers note that their stocks are shorter than is generally normal for this time of year because less material was offered this fall.

Gum Karaya—Karaya prices are unchanged at 48c. per pound for the No. 1, 43c. per pound for the No. 2 and 37c. per pound for the No. 3. Replacement costs are going higher, however, so trade people suggest that similarly advanced spot prices may be posted shortly.

Parenteral Drug Group Chooses Its 1960 Officers

The Parenteral Drug Association has elected a slate of 1960 officers headed by John Henerson, president.. Mr. Henerson is with Chase Equipment Corporation.

Others elected include vice-president, Raymond W. Barton, Mead Johnson & Co.; regional vice-president, Harold Dembo, Chicago Pharmacal Company; secretary, Hubert E. Boyden, William H. Rorer, Inc., and treasurer, Joseph W. Kouten, Smith-Miller-Patch, Inc.

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HEADS NEW UNIT: Robert A. Johnson, appointed managing director of Eli Lilly S. A., a newly-orgnaized Geneva, Switzerland, unit of Eli Lilly & Co. Indianapolis, Ind.

Chemical Future Seen Good

—Continued from page 7

$8 million this year, and a long range potential of $100 million yearly.

In antibiotics, too, there have been significant advances, chief among these being the newly-introduced synthetic penicillins, the survey goes on to note.

Acquisitions and growth in foreign markets, the report continues, also contribute to earnings gains. The lower tax rates that generally prevail abroad mean that not only does gross rise faster, but a larger proportion of volume can be carried through to net.

Drug Probe Seen 'Harmless'

Current government actions against the drug makers, particularly as they relate to pricing, will probably serve to induce more cautious selling policies in this industry, the survey goes on, but it is of the opinion that no long term adverse effect on sustained earnings will result from the forthcoming investigations.

"The drug industry is fortunate in that it possesses almost limitless potential for development of new markets."

Nevertheless, the survey cautions investors that drug stocks are, as a whole, too richly-priced in relation to the profits and dividends in store for the next twelve months, and, in most cases, for the next three to five years as well.

Turning to the chemical picture for the quarter now drawing to a close, the survey says, "The long arm of the steel strike reached out even to the chemical industry, yet sales held up comparatively well, all things considered."

Hercules Powder Upgrades International Operations Unit

Hercules Powder Company's export department has been reorganized and given upgraded status. To be known hereafter as the international department, the unit will have equal status with the company's six product divisions.

The organizational change, which goes into effect immediately, reflects the increasing importance attached to international operations by the Wilmington, Del., concern, it is reported.

Under the new set-up, Henry A. Thouron, formerly general manager of the synthetics department, becomes general manager of the international department.

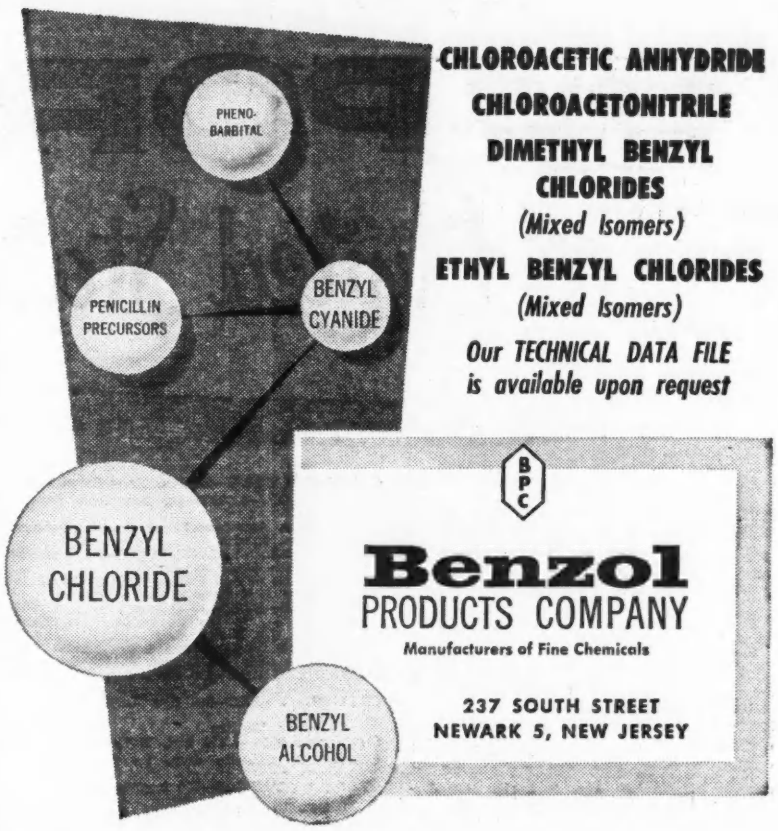
David M. Houston, who had planned to retire early next year, will stay on in an advisory capacity during the formative period of the new department.

McElroy is Back at P&G Heads Board of Directors

Neil H. McElroy has returned to Procter & Gamble Company in the role chairman of the board. Mr. McElroy, who recently resigned as Secretary of Defense, will share executive responsibilities at P&G with president Howard Morgens.

Responsibilities will be apportioned in a manner that best suits the company's interests, P&G reports. Mr. McElroy was president before going to Washington in 1947.

R. R. Deupree, who was chairman of the board, has become honorary board chairman, and Harry E. Coombe has resigned from the board.



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(N,N-Dibromobenzenesulfonamide) 50.4% Min. Act. Br_2
Ready source of positive bromine.

"MONOBROMANTIN"
(Monobromodimethylhydantoin) 38% Min. Act. Br_2
A white, stable product.

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(N,N-Dichlorobenzenesulfonamide) 31.0% Min. Act. Cl_2
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ANILINE DYES—45 dms, H Bruckmann & Lorbacher, Hamburg
5 dms, L & R Organic Products Co, Rotterdam
101 dms, Carbic Hoechst Corp, Rotterdam
13 dms, H Bruckmann & Lorbacher, Rotterdam
31 dms, Sandoz Inc, Havre
25 dms, Rotterdam
ANISE SEED—84 bgs, Seville
ANTIMONY OXIDE—197 bgs, Antwerp
ARABIC GUM—133 bgs, Nehls & O'Connell, Port Sudan
568 bgs, Meer Corp, Port Sudan
ARROWROOT—2,550 bgs, Morningstar Paisley Inc, St Vincent
ASBESTOS FIBER—600 bgs, P Carey Manufacturing Co, Lourenco Marques
4,400 bgs, Johns Manville Corp, Lourenco Marques
1,280 bgs, Keasby & Mattison, Lourenco Marques
3,500 bgs, Johns Manville Corp, Durban
ASCORBIC ACID—24 dms, Byron Chemical Co, Kobe
100 dms, Rotterdam
BALSAM—5 dms, Meer Corp, La Libertad
BASIL LEAVES—25 bls, Louis Furth, Marseille
BEESWAX—22 bgs, General Import Distributors, Havana
91 bgs, Marine Midland Trust Co, Porto Alegre
114 bgs, Kane Import Corp, Santos
382 pkgs, Koster Keunen, Assab
50 bgs, Kane Import Corp, Puerto Plata
25 bgs, Machado & Co, Ciudad Trujillo
39 bgs, Strohmeyer & Arpe, Hamburg
51 blks, Chase Manhattan Bank, Lobito
13 bgs, Havana
3 tons, Buenaventura
BENZOIN GUM—44 bdls, Meer Corp, Singapore
35 bdls, Singapore
BENZOSULFIMIDE—30 dms, Foster T Smith, Yokohama
BOIS DE ROSE OIL—20 dms, Lo Curto & Funk, Manaus
38 dms, DeSousa Co, Manaus
2 dms, Hollander Trading Corp, Manaus
2 dms, Port of Spain
BONE—504 bgs, Brisbane
BRONZE PRUSSIAN BLUE—16 dms, C J Osborn Co, Rotterdam
BUTTONLAC—50 bgs, Calcutta
CADMIUM OXIDE—50 dms, Philipp Bros Chemicals, Antwerp
CALCIUM CARBONATE—600 bgs, Pluess Staufer, Antwerp
CALCIUM CYCLAMATE—5 dms, R J Saunders & Co, Yokohama
CALCIUM NITRATE—700 bgs, McKesson & Robbins, Oslo
CAMPHOR OIL—2 dms, National City Bank, Keelung
2 dms, Lo Curto & Funk, Keelung
40 dms, Magnus Mabee & Reynard, Yokohama
CAMPHOR POWDER—50 cs, Bemo Shipping Co, Kobe
CAPSICUM OLEORESIN—8 cs, Lo Curto & Funk, Rotterdam
CARAWAY SEED—400 bgs, Nieman Bros, Gdynia
600 bgs, Louis Furth, Gdynia
150 bgs, P H Petry, Rotterdam
CARDAMOM—22 cs, Wm E Martin & Son, Colombo
32 cs, Wm E Martin & Son, Puerto Barrios
CARNAUBA WAX—100 bgs, Wm Diehl & Co, Fortaleza
223 bgs, Frank B Ross, Fortaleza
125 bgs, M Argueso & Co, Parnahyba
101 bgs, Strahl & Pitsch, Parnahyba
125 bgs, Frank B Ross, Parnahyba
312 bgs, F Henjes, Parnahyba
163 bgs, Cornelius Wax Refining Corp, Parnahyba
188 bgs, Biddle Sawyer Corp, Parnahyba
CASEIN—500 bgs, F C Gerlach, Buenos Aires
2,000 bgs, Eugenio Lang, Buenos Aires
CASSIA—760 bgs, Catz American Co, Singapore
160 bgs, M J Golombeck, Singapore
80 bls, Hismoco American Co, Singapore
160 bls, Ludwig Mueller, Singapore
2,147 bls, H M Newhall & Co, Saigon
74 bgs, Djakarta
CASTOR OIL—200 tons, Brazil Oiticica Inc, Fortaleza
CELERY SEED—170 bgs, Otto Gerdau, Bombay
CHAMOMILE FLOWERS—22 bgs, Herbarium Inc, Hamburg
CHARCOAL, BONE—250 bgs, Riches Nelson, Rotterdam
CHESTNUT EXTRACT—2,200 bgs, Barkey Importing Co, Naples
CHLORANILIC ACID—1 dm, Mutchler Chemical Co, Hamburg
CINNAMON BARK OIL—2 cs, George Uhe Co, Galle
CINNAMON LEAF OIL—5 dms, Volkart Bros, Galle
CINNAMON QUILLS—50 bls, Fritzsche Bros, Colombo
50 bls, Delano Corp of America, Colombo
50 bls, Grace National Bank, Colombo
105 bls, Manufacturers Trust Co, Colombo
CITRONELLA OIL—150 dms, L A Champon & Co, Keelung
75 dms, George Uhe Co, Keelung
25 dms, Magnus Mabee & Reynard, Keelung
25 dms, A Verley & Co, Keelung
25 dms, Givaudan Corp, Keelung
29 dms, Keelung
CLOVE—100 bgs, Dares Salaam
COBALT SULFATE—220 dms, Chemical Bank, London
COCILLANA BARK—409 bls, Meer Corp, Arica
COCONUT OIL—1,000 tons, American Trust Co, Cebu
450 tons, American Trust Co, Zamboanga
924 tons, Manila
COCONUT OIL, HYDROGENATED—68 tons, Fallek Products Co, Rotterdam
COD OIL—205 dms, Scandinavian Oil Co, St Johns
100 dms, E F Drew & Co, St Johns
COPAL GUM—26 bgs, O G Innes Corp, Manila
32 bgs, Archer Daniels Midland Co, Manila
63 bgs, Wm H Scheel, Manila
62 bgs, S Winterbourne & Co, Manila
70 bkts, Gillespie Rogers Pyatt, Macassar
COPPER CYANIDE—110 dms, Bankers Trust Co, Hamburg
CORIANDER SEED—500 bgs, Louis Furth, Casablanca
3,300 bgs, Kenitra
CORN STARCH—1,270 bgs, Rotterdam
CORNMINT OIL—24 dms, Lo Curto & Funk, Santos
CREAM OF TARTAR—200 bgs, Bank of N Y, Barcelona
225 bgs, Nylos Trading Co, Genoa
CRESYLIC ACID—29 tons, Van Oppen & Co, London
CUMIN SEED—150 bgs, Khorramshahr
CYANURIC CHLORIDE—50 dms, Geigy Chemical Corp, Yokohama
DAMMAR GUM—291 bgs, S Winterbourne & Co, Singapore
DEGRAS—50 dms, Hummel Lanolin Corp, Rotterdam
27 dms, Kersten Shipping Co, Melbourne
5 dms, J E Fox, Genoa
DEXTRIN—80 bgs, Manufacturers Trust Co, Rotterdam
400 bgs, Bestick Adhesives, Rotterdam
DICYANDIAMIDE—600 bgs, D Hauser, Kobe
100 bgs, Vandergrift Co, Yokohama
DILL SEED—80 bgs, M J Golombeck, Bombay
DIMETHYLNAPHTHALIN—1 dm, Terra Chemicals Inc, Rotterdam
DIPHENYLOL PROPANE—1 dm, Stephan Chemical Co, Rotterdam
DYES, COALTAR—20 dms, L & R Organic Products Co, Genoa
EARTH COLORS—20 ctns, United Ultramarine & Chemical Co, Rotterdam
2,350 bgs, Naftone Inc, Rotterdam
ETHYL ACETANILIDE—112 bgs, Rohner Gehrig, Antwerp
ETHYL ACETOACETATE—50 dms, Rohner Gehrig, Antwerp
EUCALYPTOL—3 dms, F D Keller & Son, Alicante
FENUGREEK SEED—64 bgs, Meer Corp, Bombay
FISHLIVER OIL—30 dms, Chase Manhattan Bank, Yokohama
5 dms, Arista Oil Products Co, Yokohama
FUEL OIL—102,421 bbls, Asiatic Petroleum Corp, Curacao
538,139 bbls, Esso Standard Oil Co, Las Piedras
130,535 bbls, American Independent Oil Co, Mena Abdulla
55,310 bbls, Shell Oil Co, Curacao
296,566 bbls, Hess Inc, Punta Cardon
210,970 bbls, Metropolitan Petroleum Corp, Curacao
103,145 bbls, Hess Inc, Puerto La Cruz
111,618 bbls, Socony Mobil Oil Co, Puerto La Cruz
114,380 bbls, Esso Standard Oil Co, Amuay Bay
126,837 bbls, Asiatic Petroleum Corp, Punta Cardon
96,264 bbls, New England Petroleum Corp, Curacao
128,516 bbls, Garden State Refining Co, Pointa Pierre
102,000 bbls, Esso Standard Oil Co, Aruba
109,352 bbls, Metropolitan Petroleum Corp, Punta Cardon
GALLNUTS—140 bgs, Chase Manhattan Bank, Lattakia
GELATIN—100 bgs, Bank of N Y, Copenhagen
40 dms, D H Burdett, London
200 bgs, B Young, London
35 dms, H Bruckmann & Lorbacher, Rotterdam
GERMANIUM OXIDE—25 cs, Antwerp
GLYCERINE—270 tons, Procter & Gamble Co, Manila
GRAPHITE—500 bgs, Asbury Graphite Mills, Mombasa
250 bgs, C Pettinos, Colombo
500 bgs, National City Bank, Colombo
GUAR GUM—200 bgs, T M Duche & Sons, Rotterdam
300 bgs, Morningstar Paisley Inc, Genoa
350 bgs, T M Duche & Sons, Genoa
GYPSUM, CRUDE—3,424 tons, Allied Chemical Corp, Halifax
10,149 tons, U S Gypsum Co, Hantsport
HEPTANOIC ACID—22 dms, International Selling Corp, Marseille
HYDRAZINE HYDRATE—30 dms, E F Drew & Co, Hamburg
HYDROFLUORIC ACID—50 dms, Liverpool
IPECAC ROOT—14 bls, Kline & Co, Manaus
JUNIPER BERRIES—300 bgs, S B Penick & Co, Rijeka
395 bgs, Meer Corp, Rijeka
80 bgs, Irving Trust Co, Leghorn
KARAYA GUM—176 bgs, Colony Import & Export Corp, Bombay
62 bgs, American Buying Co, Bombay
LAUREL LEAVES—118 bls, Levy & Levis Co, Piraeus
LEMONGRASS OIL—21 dms, Biddle Sawyer Corp, Cochin
30 dms, Lo Curto & Funk, Cochin
12 dms, Givaudan Corp, Cochin
26 dms, Van Ameringen Haebler, Cochin
LOCUST BEAN—100 bgs, Norwalk Mills, Piraeus
222 bgs, Meer Corp, Piraeus
259 cs, Naples
LOCUST BEAN GUM—325 bgs, Paul A Dunkel, Rotterdam
30 bbls, Oxyphen Products Co, Genoa
150 bgs, Nehls & O'Connell, Genoa
200 bgs, Morningstar Paisley Inc, Genoa
300 bgs, J L Quesada, Lisbon
560 bgs, Stein Hall & Co, Genoa
100 bgs, S B Penick & Co, Genoa
MACE—35 cs, Catz American Co, Singapore
12 cs, Bankers Trust Co, Singapore
5 cs, Knight Smith & Co, St Vincent
14 cs, Singapore
MAGNESITE—640 bgs, Cochin
MANGROVE EXTRACT—1,000 bgs, Saxe Cutch Corp, Singapore
MARJORAM LEAVES—60 bgs, Levy & Levis Co, Marseille
60 bgs, M J Golombeck, Marseille
MENTHOL—35 cs, Magnus Mabee & Reynard, Keelung
10 cs, Manufacturers Trust Co, Keelung
55 cs, Nichimen Co, Santos
MERCURY—130 flks, Bankers Trust Co, Leghorn
80 flks, Genoa
MOLASSES—555 tons, W R Grace & Co, Salaverry
MONOCHLOROACETIC ACID—750 dms, International Selling Corp, Marseille
MUSTARD SEED—400 bgs, Frank Tea & Spice Co, Copenhagen
MYROBALANS—610 bgs, Olson Importing Co, Bombay
MYRRH GUM—40 bgs, S Hartman, Aden
NAPHTHALENE—360 bgs, Witco Chemical Co, Liverpool
NAPHTHOLS—23 dms, H Bruckmann & Lorbacher, Hamburg
b-NAPHTHOL—240 bgs, Orlex Dyes & Chemical Corp, Rotterdam
NUTMEG—75 bgs, Dodge & Olcott, Djakarta
280 bgs, Dodge & Olcott, Singapore
22 bgs, Gillespie & Co, Port of Spain
6 bgs, Gillespie & Co, St Vincent
13 bgs, Knight Smith & Co, St Vincent
NUTMEG OIL—5 dms, Singapore
OLEYL ALCOHOL—20 dms, Arista Oil Products Co, Yokohama
OLIVE OIL—25 dms, Marine Midland Trust Co, Barcelona
25 dms, Sterling National Bank, Barcelona
20 dms, Uddo & Taormina, Palermo
102 dms, Manufacturers Trust Co, Seville
75 dms, Seville
OPIUM—100 chts, Calcutta
PALM OIL—414 tons, Balfour Guthrie, Matadi
PALMKERNEL OIL—314 tons, Durkee Famous Foods, Matadi
326 tons, Balfour Guthrie, Matadi
1,341 cs, B M T Commodity Corp, Rotterdam
PAPAIN—11 cs, Chas L Huisking & Co, Colombo
50 cs, American Ferment Co, Colombo
40 cs, Chas L Huisking & Co, Mombasa
68 cs, Bemo Shipping Co, Mombasa
60 cs, Mombasa
308 cs, Colombo
PAPRIKA—200 bgs, M J Golombeck, Alicante
100 bgs, Ludwig Mueller, Alicante
100 bgs, Hudson Tea & Spice Co, Alicante
500 bgs, A Beckmann, Alicante
200 bgs, Gallagher & Ascher, Alicante
200 bgs, A A Savia, Alicante
50 bgs, Wm E Martin & Son, Alicante
300 bgs, Alicante
PAPRIKA EXTRACT—10 dms, Irving Trust Co, Alicante
43 cs, J Weinstein, Alicante
100 cs, Alicante
PATCHOULI OIL—10 dms, Polarome Manufacturing Co, Penang
8 dms, National City Bank, Penang
PEATMOSS—200 bls, Halfmoon Trading Co, Rotterdam
600 bls, E Dunwoody, Rotterdam
350 bls, New Amsterdam Trading Co, Bremen
PEPPER, BLACK—880 bgs, Ludwig Mueller, Cochin
160 bgs, C M Van Sillevoldt, Cochin
160 bgs, California Commodities Corp, Cochin
160 bgs, Borneo Sumatra Trading Co, Cochin
160 bgs, Mutual Spice Co, Cochin
880 bgs, A G Dunn, Cochin
160 bgs, East India Trading Co, Cochin
160 bgs, Otto Gerdau, Cochin
160 bgs, Internatio Rotterdam, Cochin
55 bgs, P H Petry, Singapore
7,306 bgs, Singapore
1,360 bgs, Cochin
PEPPER, RED—200 bgs, M J Golombeck, Yokohama
200 bgs, East India Trading Co, Yokohama
52 bgs, S B Penick & Co, Mombasa
200 bgs, East India Trading Co, Kobe
51 bgs, Kellys America Ltd, Mombasa
100 bgs, Louis Furth, Kobe
100 bgs, Louis Furth, Yokohama
30 bgs, California Commodities Corp, Kobe
100 bgs, American Commerce Co, Kobe
PEPPER, WHITE—70 bgs, K H Landes & Co, Singapore
70 bgs, A G Dunn, Singapore
70 bgs, Atlanta Textile Corp, Singapore
23 bgs, Otto Gerdau, Colombo
70 bgs, East India Trading Co, Singapore
70 bgs, J H Elton, Singapore
200 bgs, East India Trading Co, Belem-Para
630 bgs, Singapore
PERCHLOROETHYLENE—225 dms, Marseille
PERU BALSAM—1 dm, Wessel Duval & Co, Puntarenas
PETROLEUM, CRUDE—99,423 bbls, Sun Oil Co, Santos
199,545 bbls, California Oil Co, Sidon
257,423 bbls, California Oil Co, Ras Tanura
313,744 bbls, Esso Standard Oil Co, La Salina
134,293 bbls, Hess Inc, Punta Cardon
262,151 bbls, Phillips Petroleum Co, Puerto La Cruz
58,272 bbls, Esso Standard Oil Co, Las Piedras
76,000 bbls, Bay Refining Co, Puerto La Cruz
132,000 bbls, Sun Ray Mid Continent, Puerto La Cruz
PHENOLIC RESIN—4 dms, Carrier Corp, Gothenburg
PHTHALIC ANHYDRIDE—286 bgs, Hudson Shipping Co, Copenhagen
1,000 bgs, International Chemical Corp, Durban
893 bgs, Hudson Shipping Co, Yokohama
PIMENTO—320 bgs, Otto Gerdau, Kingston
40 bgs, Kellys America Ltd, Kingston
PIMENTO LEAF OIL—4 dms, Magnus Mabee & Reynard, Kingston
POLLACKLIVER OIL—5 dms, Arista Oil Products Co, Yokohama
150 dms, National City Bank, Yokohama
POLYVINYL ACETATE RESIN—550 bgs, G G Lippelgoes, Kobe
POLYVINYL ALCOHOL—1,200 bgs, Marubeni Iida Co, Kobe
POLYVINYL CHLORIDE RESIN—900 bgs, Usher Plastics Ltd, Yokohama
POTASH, CAUSTIC—360 dms, B T Chemco Inc, Gothenburg
POTASSIUM GUAIACOL SULFONATE—20 cks, Havre
POTASSIUM META BISULFITE—200 dms, H Reifenberg, Rotterdam
23 dms, American Firstoline Corp, Rotterdam
POTASSIUM NITRATE—220 bgs, Lo Curto & Funk, Bremen
PROPANTHELINE BROMIDE — 2 dms, Byron Chemical Co, Hamburg
PRUSSIAN BLUE—60 dms, Smith Chemical & Color Co, Rotterdam
45 dms, Tar Residuals Inc, Rotterdam
PSYLLIUM SEED, HUSK—181 bgs, T M Duche & Sons, Bombay
PYRETHRUM EXTRACT—18 dms, McLaughlin Gormley King Co, Dar es Salaam
20 dms, Mombasa
QUEBRACHO EXTRACT—869 bgs, Barkey Importing Co, Buenos Aires
4,821 bgs, Tanimex Corp, Buenos Aires
RICE STARCH—200 bgs, Manhattan Adhesives Corp, Bremen
RUTIN—10 dms, Chas L Huisking & Co, Melbourne
44 dms, Meer Corp, Sydney
R-SALT—12 dms, D C Andrews, Genoa
SACCHARIN—20 dms, R J Saunders & Co, Yokohama
SAGE LEAVES—200 bgs, Trieste
SALICYLATES—67 dms, D Young Gotnenburg
SANDALWOOD—600 bgs, R D Webb & Co, Madras
SANDALWOOD OIL—5 cs, Polarome Manufacturing Co, Cochin
9 cs, National City Bank, Cochin
9 cs, Givaudan Corp, Cochin
7 cs, Fritzsche Bros, Bombay
10 cs, Calcutta
SEEDLAC—750 bgs, Gillespie Rogers Pyatt, Bangkok
1,950 bgs, Calcutta
SENNA LEAVES—15 bls, Meer Corp, Port Sudan
140 bls, Tuticorin
SENNA PODS—33 bls, Meer Corp, Port Sudan
SESAME OIL—50 dms, Pacific Vegetable Oil Corp, Nagoya
SESAME SEED, HULLED—400 bgs, Ideal Trading Co, Corinto
SHELLAC—500 bgs, Capitol Shellac Corp, Bangkok
250 bgs, Colony Import & Export Corp, Bangkok
150 bgs, MacLac Co, Calcutta
100 bgs, Calcutta
SODIUM CHLORIDE—150 dms, H Bruckmann & Lorbacher, Bremen
SODIUM METASILICATE—1,000 bgs, International Selling Corp, Dunkirk
SODIUM PERBORATE—200 bgs, Hudson Shipping Co, Marseille
SODIUM PHOSPHATE—125 cs, Milwaukee Spice Mills, Rotterdam
40 cs, F Marie & Son, Rotterdam
SODIUM SILICOFLUORIDE—450 bgs, Copenhagen
STARCH—800 bgs, Morningstar Paisley Inc, Rotterdam
STRYCHNINE ALKALOID—6 cs, Prentiss Drug & Chemical Co, Southampton
TAMARINDS—7 bbls, Meer Corp, St Johns
TAPIOCA FLOUR—1,882 bgs, Geismar & Co, Kohsichang
1,344 bgs, Stein Hall & Co, Kohsichang
4,252 bgs, Poons Co, Kohsichang
11,200 bgs, Morningstar Paisley Inc, Kohsichang
2,888 bgs, Stein Hall & Co, Bangkok
TARTARIC ACID—200 bgs, Nylos Trading Co, Palermo
120 kgs, Nylos Trading Co, Palermo
THIOUREA—400 bgs, D Hauser, Kobe
THYME LEAVES—80 bls, Louis Furth, Marseille
198 bgs, M J Golombeck, Alicante
99 bgs, Meer Corp, Alicante
202 bgs, Alicante
TOLU BALSAM—25 cs, Barranquilla
ULTRAMARINE BLUE—210 bgs, Whittaker Clark & Daniels, Liverpool
UREA—1,000 bgs, Nylos Trading Co, Genoa
600 bgs, Rotterdam
VANILLA BEANS—15 cs, L A Champon & Co, Semarang
38 cs, Zink & Trieste, Marseille
179 cs, Tamatave
VETIVER OIL—3 dms, Port Au Prince
WATTLE EXTRACT—521 bgs, Olson Importing Co, Mombasa
537 bgs, Hammond & Carpenter, Durban
ZINC SULFIDE—1,000 bgs, C J Osborn Co, Rotterdam
ZIRCON SAND—498 bgs, Lo Curto & Funk, Brisbane

Los Angeles

ANTIMONY OXIDE—200 bgs, Glasgow
CALCIUM CARBONATE—6,200 bgs, Pluess Staufer, Antwerp
COPRA—1,000 tons, Cargill Inc, Cebu
600 tons, Procter & Gamble Co, Cebu
250 tons, Pacific Vegetable Oil Corp, Iloilo
500 tons, Cebu
CREAM OF TARTAR—100 bgs, Nylos Trading Co, Genoa
EARTH COLORS—900 bgs, Naftone Inc, Bremen
900 bgs, Bremen
IRON OXIDE—200 bgs, J Lee Smith, Bremen
MAGNESIUM CARBONATE—20 cs, Antwerp
PAPRIKA—50 bgs, W L Willner, Marseille
PEPPER, RED—100 bgs, Hismoco American Co, Kobe
PEPPERMINT LEAVES—134 cs, A J Fritz, Hamburg
PETROLEUM, CRUDE—263,260 bbls, Texaco Co, Rastanura
POLYVINYL CHLORIDE—25 cs, Robeco Chemicals Inc, Yokohama
QUEBRACHO EXTRACT—621 bgs, Tanimex Corp, Buenos Aires
SODIUM NITRATE—21,617 bgs, Morgan Guaranty Trust Co, Tocopilla
TAPIOCA FLOUR—500 bgs, Stein Hall & Co, Santos

Philadelphia

ARSENIC TRIOXIDE—225 dms, American Firstoline Corp, Marseille
ASBESTOS FIBER—1,360 bgs, Chas Kurz & Co, Lourenco Marques
400 bgs, Davies Turner & Co, Durban
CALCIUM CARBONATE—1,600 bgs, Hammill & Gillespie, London
480 bgs, Antwerp
CALCIUM PHOSPHATE, DIBASIC—1,200 bgs, E J Lang, Antwerp

CASEIN—1,000 bgs, Borden Co, Buenos Aires
499 bgs, National Casein Co, Melbourne
900 bgs, Buenos Aires
CASTOR OIL—200 tons, Santos
CRESYLIC ACID—100 dms, Concord Chemical Co, Glasgow
FLUORAL MINERAL—6,000 bgs, Chas Kurz & Co, Copenhagen
FUEL OIL—97,938 bbls, Shell Oil Co, Punta Cardon
GELATIN—300 bgs, Rotterdam
PEATMOSS—1,505 bls, Keer Mauer, Bremen
PETROLEUM, CRUDE—142,424 bbls, Gulf Oil Corp, Mina Al Ahmadi
115,404 bbls, Gulf Oil Corp, Bachaquero
131,850 bbls, Atlantic Refining Co, Punta de Palmas
118,000 bbls, Socony Mobil Oil Co, Puerto La Cruz
389,028 bbls, Texaco Co, Covenas
POLLACKLIVER OIL—100 dms, J H Faunce, Yokohama
POTASSIUM NITRATE—330 bgs, Bremen
QUEBRACHO EXTRACT—1,651 bgs, Olson Importing Co, Buenos Aires
TAPIOCA FLOUR—500 bgs, Manhattan Adhesives Corp, Itajai
4,600 bgs, Stein Hall & Co, Itajai
800 bgs, Jung Forwarding Co, Itajai
UREA—3,000 bgs, Chemical Manufacturing Co, Glasgow
500 bgs, Nylos Trading Co, Genoa
YACCA GUM—75 bgs, F L Kraemer, Port Adelaide
ZINC OXIDE—200 bgs, C B Chrystal Co, Marseilie
ZIRCON SAND—4,000 bgs, Foote Mineral Co, Brisbane
39,800 bgs, Brisbane

San Francisco

ANTIMONY—20 cks, H M Newhall & Co, Hull
ANTIMONY OXIDE—223 bgs, Hull
BONEMEAL—357 tons, Stauffer Chemical Co, Buenos Aires
CALCIUM CARBONATE—2,600 bgs, Pluess Staufer, Antwerp
CARAWAY SEED—300 bgs, Rotterdam
CARBON TETRACHLORIDE—150 dms, P W Bellingall, Genoa
CORIANDER SEED—400 bgs, Rotterdam
CREAM OF TARTAR—60 dms, Nylos Trading Co, Genoa
CUBE POWDER—860 bgs, Foreign Domestic Distributors, Callao
CUMIN SEED—100 bgs, Barekat & Co, Hong Kong
CURARE—5 cs, Menlo Pharmaceuticals, Callao
EARTH COLORS—450 bgs, Naftone Inc, Bremen
FENUGREEK SEED—65 bgs, Rotterdam
GINGER—32 bgs, Kellys America Ltd, London
GLUCOSAMINE HYDROCHLORIDE—10 cs, Atlantic Bank of N Y, Yokohama
KELPMEAL—400 bgs, Pacific National Bank, Bergen
PAPRIKA—75 bgs, W L Willner, Marseille
PEPPER, RED—50 bgs, California Commodities Corp, Kobe
PETROLEUM, CRUDE—523,337 bbls, Richfield Oil Co, Ras Tanura
PINE GUM—50 cs, N G Very Inc, Rotterdam
ROSEMARY LEAVES—34 bgs, H M Newhall & Co, Marseille
SAGE LEAVES—80 bgs, H M Newhall & Co, Bremen
SODIUM CHLORATE—666 dms, Marseille
SODIUM CYANIDE—150 dms, C M C Chemicals Inc, Hull
SODIUM NITRATE—2,611 bgs, Morgan Guaranty Trust Co, Tocopilla
TALC—500 bgs, Charles Mathieu, Genoa
TAPIOCA FLOUR—250 bgs, Stein Hall & Co, Santos

Chemists: Opportunity

—Continued from page 4

selected microorganisms, their resistance to heat and ionizing radiation and the mechanism by which they degrade materials.

- Research on the regeneration of the flavors and odors of foods which are reduced or lost by processing, in order to improve ration acceptability.
- A study of the problems incident to basic research in the fields of radiation chemistry, physics and biology.

On its need for compounding techniques for the new elastomers, the Pentagon has this to say:

"Several new rubbers have been developed in the Army-wide rubber program and by industry which do not lend themselves to processing and compounding by typical rubber methods.

"These materials include the fluorine-containing, the urethanes and fluorosilicones. Although these materials are available in rather large quantities, none of them are presently used, to any extent, in military items."

As for fungicides, the Defense department reports that it has none at the present time which is "colorless, compatible with other components of a finish, stable to chemical change and actinic radition, resists leaching, is non-toxic to humans and economical both with regards to effective concentrations and cost."

Among the other military "must" items are these:

- A device to prevent fogging of plastic facepieces used in aircraft fire-fighting and rocket fuel handling hoods.
- A chemical additive which is soluble in jet fuel and can be used in very small concentrations (0.1 to 0.2 percent of fuel) to prevent the formation of ice in such fuel system components as fuel transfer valves and filters.
- An insect repellent which will protect a man for at least twelve hours.
- An insect repellent which can be applied during the manufacture of clothing and which will last the life of a garment.
- A process for application of lindane to packaging liners in such a way as to make the insecticide suitable for military needs.

Chemical Import Business Falls Off By Nearly a Fifth

The chemical import business is off by nearly a fifth, according to the October figures just released by the Bureau of Census.

Some $27.9 million worth of chemical and related products were shipped here from abroad during October. This is almost 20 percent below September's $33.4 million worth of imported chemicals, but about 3 percent more than the $27.1 million for October of last year.

A total of $289.9 million worth of chemicals were sent to the United States by foreign suppliers during the first ten months of this year.

Imports of metals and manufactures, except machinery and vehicles, fell from $249.4 million in September to $219.6 million in October. The drop was due mainly to substantial declines in imports of refined and unrefined copper and copper concentrates, nickel oxide and nickel pigs and ingots, and tin ore.

The decrease in chemical imports during October was much steeper than that for merchandise as a whole for the month. General imports in October totaled $1,204.8 million, about 13 percent below the all-time record total of $1,391.8 million reported in September.

Chemical Companies Face Increased Parcel Post Bills

Come next February 1, chemical companies using the parcel post services for delivering their products to customers will find their bill increased.

The Interstate Commerce Commission has authorized the Post Office Department to raise parcel post rates an average of 17.1 percent. Postmaster General Summerfield said that he will put the new rates into effect after the Christmas rush is over.

This is the second increase in parcel post rates in six years and is expected to net the Post Office about $88 million a year in additional revenues or an amount about equal to current losses on this service. Some examples of the increases are as follows:

A four-pound parcel post package for local-area delivery will require 28 cents postage instead of 23 cents. The same parcel going all the way from the east coast to the west coast, or to Hawaii or Alaska, will cost $1.02 rather than 87 cents.

Obituaries

Michael J. Coppola

Michael J. Coppola, sales representative for E. I. duPont de Nemours & Co., Wilmington, Del., died December 8 while attending the forty-sixth annual meeting of the Chemical Specialties Manufacturers Association in Washington, D. C. He was fifty-five years old.

Widely known in the aromatics and aerosol trade, Mr. Coppola had been sales representative for duPont's "Freon" products since 1953.

Mr. Coppola joined Monsanto Chemical Company in 1917. Two years later he moved to Rhodia Chemical Company, New York aromatics firm, which later was acquired by Newport Chemical Company. He went to duPont in 1931 when duPont purchased the latter and integrated it into its organic chemicals division.

Ralph E. Gage

Ralph E. Gage, formerly director of research and development for Olin Mathieson Chemical Corporation, New York, died December 8 in Stamford, Conn. He was seventy years old.

Mr. Gage was associated with Olin Mathieson from 1916 until his retirement in 1957.

August J. Spieler

August J. Spieler, founder and president of Celina Stearic Acid Company, Celina, Ohio, died December 5 in that city. He was eighty-five years old.

Mr. Spieler's career in the fatty acid industry began in 1892 with Emery Industries, as assistant to the president. He founded the Celina concern in 1907 and presided over it until his death.

Ludwig Charles Boos, vice-president of United States Rubber Company and general manager of its international division, died December 7 in Cos Cob, Conn. He was fifty-six years old.

Dr. John V. Starr, manager of products planning for Esso Standard Oil Company's petroleum specialties department, died December 6 in Cranford, N. J. He was fifty-seven years old.

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Essential Oils, Aromatics

Lemongrass witnessed a substantial drop at the same time that a good many of its derivatives were marked up in price. Lemongrass fell from its previous high $2.25 per pound to $1.95 per pound. As yet the derivatives have not risen above the range quoted in these pages. Another noteworthy price change is in Florida orange oil. Due to an excess of material, the price dropped from 70 cents per pound to 68 cents per pound. Unofficial reports were that some dealers are quoting prices as low as 62 cents per pound. These, however, could not be confirmed.

Among the aromatic chemicals, citral dropped 10 cents per pound and eugenol is reported to be easing off considerably. No actual change was noted, though.

Natural Italian bergamot seems to be softening as is Dalmatian sage. Items that are gaining strength, according to the weekly survey of the essential oil, aromatic chemical and seeds and spice dealers in the metropolitan New York area, are Brazilian bois de rose and cedarwood. Spearmint and peppermint are still quite firm, but not advanced in price since the previous issue.

Price Trends

Advanced
None

Reduced
Citral, 10c. per lb.
Lemongrass, 35c. per lb.
Orange, Florida, 2c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 12, 1958
146.67	146.70	147.30	147.88

For Current Prices see page 9

Essential Oils

Bergamot—The word is that the market is softening a bit. Prices on spot, however, have not changed. They continue to range between $12.75 and $14 per pound.

Bois de Rose—Some dealers report that prices are advancing. According to our listing, the prices still range between $1.90 and $2.35 per pound for the Brazilian and $1.80 and $2.30 per pound for the Peruvian.

Cedarwood—Firming in this market has been reported.

Clove Leaf—Last month's notation that the market is firming is the first real word on clove oil that we have heard in quite a while. Prices remain relatively high following the rapid advances brought on chiefly by storms and floods on the island of Madagascar early this year. They tapered off a bit, but they are still considerably higher than they have been since 1955.

In the light of this somewhat inflationary situation, which is expected to undergo some changes in the future, the following information ought to be of interest to clove oil customers.

Exactly where the clove tree originated is unknown, but the first mention of them was made by Portuguese explorers who came across them on the island of Amboyna.

Clove, of course, was one of the spices that the pirates considered worthwhile booty, so many bloody battles were fought over cargoes from the 16th to the 19th centuries.

The Portuguese were in possession of the Moluccas for about 100 years, until 1605 when the island was conquered by the Dutch who soon monopolized spice trade.

And, according to historical records, Holland maintained this monopoly until 1769 when the French navigator, Poivre, was finally able to sneak some clove plants from the Moluccas and plant them on the island of Bourbon, now called Reunion Island, and to the Ile de France, now called the island of Mauritius.

After Poivre's daring move, the British East India Company got some plants from Mauritius and planted them on the island of Penang, off the coast of Malacca.

Then, as recently as 1818, the Arabs planted some clove seeds on the islands of Zanzibar and Pemba, both off the east coast of Africa.

Today's chief suppliers of oil are the Zanzibar and Pemba Islands and the French island of Madagascar. Other producing areas are on the islands of Ceylon and Penang and in Indonesia.

Cloves at these locations, however, are of such high quality and high price that they are seldom distilled. They are used in the regular spice trade.

Geranium—After its rapid decline, this oil is showing signs of firming, according to information from source. Prices on spot remain at their previous level. Algerian material is still selling for $19 per pound and Bourbon material for $18 per pound.

It is interesting to note that, in Algeria, owing to the warm climate, the geranium plant is a perennial. Winter temperature averages from 10 to 12 degrees centigrade with no frosts to damage the plants.

The plant grows rapidly, forming clusters of leaves on a heavy woody stock. It grows to be approximately 3 feet tall. Although the plant is rather resistant to drought, prolonged periods of dry weather lower the yield of the oil.

Harvesting of the geranium is tedious because it means stooping for hours in the heat of Algeria while cutting the tough geranium with a sickle.

Usually two cuttings are taken each year. The first lasts from late April to late June—while the plants are in full bloom. At this stage of their development, the leaves have a rose-type of fragrance. The second cutting lasts from October to mid-November—depending on the growth of new leaves.

After all the cuttings have been made, the plants are put on trucks and taken to the distillery which usually is run and owned by the owner of the field. The plant material is stacked near the stills for a day and night to dry so as to reduce its volume. Then the distillation is accomplished in regular steam stills—the steam being generated in a separate boiler.

The yield of oil per acre depends on the amount of plant material that the area produces and therefore mainly on the age of the plants. A young field, for instance, produces more oil than an old field. Generally speaking, the following factors influence the yield of oil; weather, whether wet or dry; soil, whether calcareous or clay, and age (of the plantation).

Lemongrass—News from source is that shipping prices are down and news from dealers here is that spot prices are down. From its previous high, $2.25 per pound, the price has dropped to $1.95 per pound.

Ocotea Cymbarum—Information from source indicates that the market is 10 percent stronger than it was two weeks ago. No further spot price advances have been reported here, but general strength is noted.

The tree from which the oil is distilled grows wild and profusely in the forests of the State of Santa Catharina in Brazil. It grows along the River Itajai, mainly in the provinces of Rio do Sul, Blumenau, Itajai, Camboriu and Grao Para.

In many locales, the oil is merely a side operation to sawmilling, according to agricultural information received here. The logs are first sawed into blocks and then reduced to sawdust. The chips and dust are put into stills and then sprayed with steam for 24 hours. The resulting oil is collected into Florentine flasks and then filtered through flannel, cotton and filter paper.

Orange—An abundance of Florida oil is responsible for declining prices, it was reported. The low of the range definitely dropped from 70c. per pound to 68c. per pound with some reports of material going for as little as 62c. per pound. No confirmations of this low were available, however.

Spearmint—The tight situation apparently is as "ticklish" as ever—to use the apt adjective of one essential oil dealer here in the New York area. No further price advances were noted, which means that the range continues between $9 and $11.25 per pound.

Vetiver—Since the prices were reduced rather drastically from their high of a month ago, the market is firming up a bit. News from source is that Bourbon material is a good 10 percent stronger than it was last month.

Prices on spot remain at their previous levels. Burbon continues to sell

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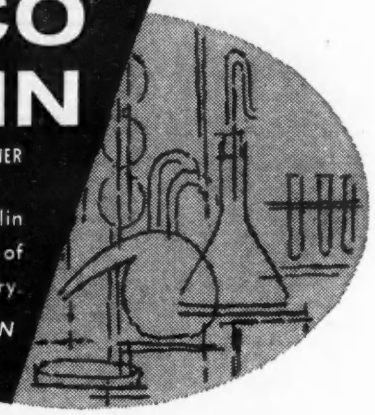

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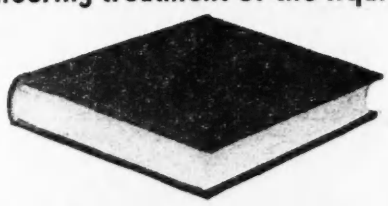

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Essential Oils

for $16 per pound and Haitian continues to sell for $14 per pound.

For years, according to reliable agricultural information received here, vetiver produced on the island of Reunion, located some 400 miles east of Madagascar, in the Indian Ocean, has been famous for its high quality. This is apparently due to the care taken of the root material before distillation.

Of course, the odor and the physiochemical properties of vetiver oil depend on the age of the root—the time which elapses between the planting and the harvesting.

Producing areas on Reunion are in the southern, eastern and extreme southeastern parts of the island—the principal centers being La Petite Ile, Monvert and Les Lianes. And, it is significant that each of these centers is in a mountainous section of Reunion which abound with water, drawn from nearby springs and small rivers.

This is true because the distillation of vetiver root requires a great deal of water. Often water is conveyed to the stills by a system of simple bamboo tubes.

Most of the oil is produced by settlers of French decent who own rather large tracts of land. They hire people directly, sometimes, to work the vetiver, but often they get their roots from sharecroppers.

Aromatic Chemicals

Citral—Reports from dealers throughout the New York area indicate that the market is definitely softening. From its previous high, $3.75 per pound, citral has dropped to $3.65 per pound. Further declines are anticipated.

Eugenol—This chemical, too, is reported to be easing off, but as yet, no actual price changes have taken place.

Seeds and Spices

Cassia—Trading was light last week with the market exhibiting general firmness.

Pepper—On the whole, the market is reported to be easing a bit.

The following information, describing the problems of importing pepper, was compiled by the United States Department of Agriculture and published originally in the Foreign Agriculture Circular.

For the benefit of foreign manufacturers and shippers, the provisions of the Federal Food, Drug, and Cosmetic Act, as Amended, have been set forth in nontechnical language in a publication entitled, "Requirements of the United States Food, Drug, and Cosmetic Act—A Guide For Foreign Manufacturers and Shippers."

Through the years the greatest problem in importing pepper into the United States has been cleanliness. Cooperation between Indian shippers and the United States spice trade has resulted in pepper arriving from India in good condition.

During 1953, a cooperative study was undertaken between the American Spice Trade Association and the Stored-Product Insects Section, Agricultural Marketing Service, United States Department of Agriculture, to investigate the insect problem in imported whole pepper as well as the possible relationship of such infestation to mold growth.

The paper published as a result of this undertaking, "Studies on the Storage and Shipment of Whole Black Pepper Grown in the Orient," recommended the use of polyethylene liners for shipping pepper to the United States.

Properly cleaned pepper so shipped from India has arrived in excellent condition. Additionally, this study indicated that properly dried pepper could be stored in these bags through more than one rainy season without danger of mold growth.

Since some pepper is normally held over in the producing countries and mixed with the first pickings of the new crop, adoption of this suggestion would apparently result in less loss due to mold growth.

Chemical Spending

—*Continued from page 3*

lion on new plants and equipment during the first three months of next year, it is revealed in the latest quarterly report of the Department of Commerce and the Securities & Exchange Commission.

Calculating on the basis of a seasonally adjusted rate, the first quarter figure indicates that the chemical industry will wind up the entire year of 1960 with a new capital investment of $1.42 billion.

This tops 1959 spending by $186 million and 1958 outlays by $100 million. Expenditures of the industry for new plants and equipment in 1957 totaled $1.724 billion.

The $324 million that the industry has earmarked for expansion during the first quarter of 1960 compares with only $260 million invested in new plants and equipment during the first three months of this year.

While it is a drop of $38 million from the current quarter (due to winter conditions), it exceeds the spending in each of the other quarters during 1959.

For business as a whole, outlays for 1959 are now expected to total $32.5 billion, approximately 7 percent above 1958.

Vitro Awarded Contract For Italian Nuclear Unit

Vitro International, a division of Vitro Corporation of America, New York, has received a contract to design and build a $2 million nuclear research reactor facility for CAMEN, (Comitato Atomica Militare Energia Nucleare), an agency of the Italian government.

The reactor, to be situated between Livorno and Pisa, is of the pool type with a capacity of 5,000 kilowatts.

Vitro International, through its Italian subsidiary, Vitro Italiana S.p.A., will be in operation early in 1961.

The CAMEN research reactor facility will be Italy's third, two of which are of Vitro design. Vitro was also architect-engineer of the first facility completed, the Ispra Center for Nuclear Research.

Aerosol Makers Are Looking

—*Continued from page 7*

turned out in 1958. On top of this, they will increase their penetration of the overall insecticide market from the present 42 percent to 50 percent in 1968.

- Aerosol room deodorants, sales of which totaled 63 million units in 1958, may carve out a 113-million-unit market in 1968.

- Aerosol shave creams are likely to jump from last year's 65 million units to nearly 100 million units by the end of '68.

Why Groceries Like Aerosols

Among those happy about the phenomenal rise in aerosols are the grocery chains, Gerson Barnett, director of purchasing for Giant Food Stores, Landover, Mr., assured CSMA. Here's why:

Aerosol products sold through food stores in 1958 amounted to $206,800,000. This is a 21 percent gain over 1957 and almost four times the total amount of aerosols retailed in the United States in 1951.

The wide-ranging penetration of the food and drug field by aerosols is underscored in statistics presented by James O. Peckham, executive vice-president of A. C. Nielsen Company, New York. These are the market shares aerosols now have in five major product groups:

Hair sprays, virtually 100 percent; air fresheners, 72.7 percent of unit sales; shave creams, 63.2 percent; window cleaners, 19.9 percent, and hair tonics, 1.2 percent.

As to future aerosol prospects, here's what Mr. Peckham has to say:

Future Aerosol Prospects

"I believe that shampoos, men's hair dressings and hair tonics, the very important and fast-developing field of general-purpose household cleaners, and furniture polishes all offer splendid opportunities both from the standpoint of potential and the all important factor of consumer convenience in application.

"The food/drug consumer sales of these three product categories alone total approximately 600 million units annually. Even if you are able to convert only 30 percent of this potential over the next five years, you will have built a very substantial additional volume—about 50 percent more than your 1957 production from all non-food product sources combined."

Chemical Plants Fall Behind

—*Continued from page 7*

constituted the worst bottle-necks in the past—coal, electric power and metals—seem to have been generally maintained."

It is expected that England and western Europe will continue to be barraged by heavy orders for chemical equipment through 1960, and sources here won't be surprised to see Khrushchev raise the subject again when Eisenhower visits Russia next spring.

NAT'L STARCH VICE-PRESIDENT: Norman Riley, appointed a vice-president of National Starch & Chemical Company (Canada), Ltd., Toronto.

Chemical Sales Rocketing

—*Continued from page 4*

whole, however, it expects that '60 will be as good a year as '59.

The agency thinks a shortage of phosphoric acid and ammonium sulfate is likely to develop by the spring peak next year. A shortage of cokeoven ammonium sulfate may stem from the 1959 steel strike, when suppliers were unable to build up stocks.

Here's what BDSA has to say about several other specific chemical areas:

If production of steel is not interrupted, naphthalene and other cyclic crudes should be above 1959 levels.

Production and sales of cyclic intermediates next year should be up a bit from '59.

Output and sales of the large-volume acyclic chemicals will be large in the coming year.

The pharmaceutical industry will show its usual annual 10-percent increase.

A $1.1-billion market for soaps and synthetic detergents is anticipated next year, as the shift from soap to syndets slackens.

Cosmetic Sales: $1.6 Billion

Retail cosmetic sales will reach a new peak of $1.6 billion, with stepped-up demands for hair rinses, tints and dyes, aerosol shaving creams and other men's toiletries playing a key role in the increased sales of cosmetics.

Plastics material production will rise in 1960, but not as fast as during '59, approximating 6.5 billion pounds—a 10-percent gain over 1959.

Sales of paint, varnish and lacquer will top $2 billion for the first time.

There will be lots more competition in 1960 for world chemical markets, BDSA thinks. US chemical exports are expected to exceed slightly the $1.5-billion mark set in 1957. Imports also will climb, probably above $500 million.

Finally, the agency sees 20 percent more money being spent next year on chemical expansion.

Delaney Clause

—*Continued from page 3*

such a step. He said that the government had been put in a difficult position by the "grandfather" clause in the animal feed situation and added:

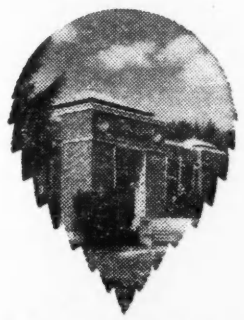
"I am against 'grandfather clauses.' This whole situation could be cleared up if we could get rid of the whole 'grandfather clause' concept."

The action taken by the secretary on stilbestrol in its use in poultry came as a result of a re-examination of the drug for agricultural purposes following the policy statement by the Food and Drug Administration last May halting new uses of the drug, and more recently, by the cranberry fracas that stirred up new interest in carcinogens entering the food supply.

The secretary said that testing methods used to detect residues of stilbestrol in meat and poultry have been developed and refined to a point where they are now so sensitive as to reveal traces of the chemical as small as two parts per billion.

Using these techniques, no residues of the chemical have yet turned up in beef, mutton or lamb, but traces have been found in the skins, livers and kidneys of chickens.

About one percent of the chickens produced in this country are treated with stilbestrol in a so-called finishing process that distributes the fat in the birds to give them a plump and fine appearance.



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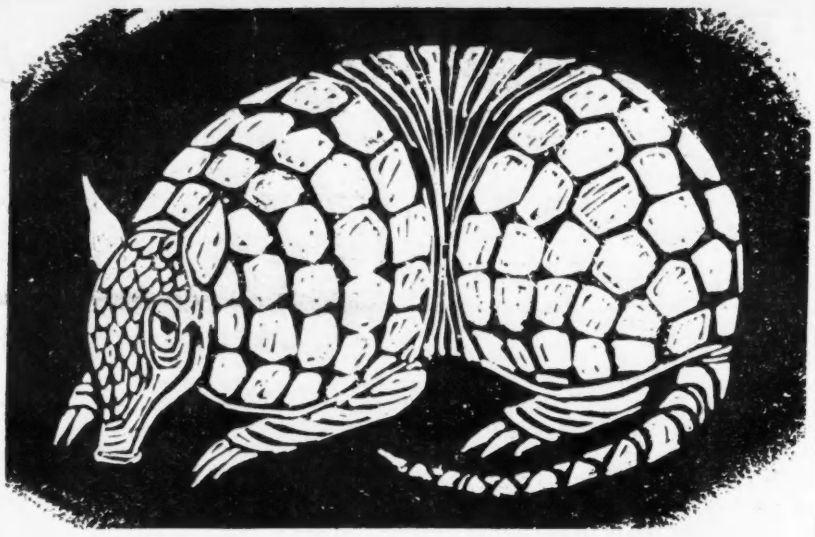

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Coatings Materials

Several price changes in the form of both advances and declines have been announced by a major producer for the first of the new year. All grades of chrome green, C.P., will move up 1 cent to 2 cents per pound. Molybdated orange listing will also be 1 cent firmer, while pigment green B price will climb 5 cents per pound. On the reduced side, naphthol ITR red toner will be easier by 50 cents per pound. General fluctuations in this market of late have been on the upward side. Recently boosted in prices were all grades of cadmium, leaded zinc dust and cupric and cuprous copper oxide. All of the changes were directly and indirectly, through price rises in their raw materials, the result of the steel strike.

Announcement was made by a major producer last week of a new price schedule for several of the phthalates. As of the first of the new year, dibutyl phthalate will be two cents firmer, and di-iso-octyl and dioctyl phthalates will be four cents higher.

The automotive industry continues to consume goodly quantities of acrylics for production of the new heat cured acrylic lacquers designed to retain gloss and film integrity better than other finishes yet put out.

January 1 Price Changes

Advanced

Chrome green, CP, 1c. to 2c. per lb.
Dibutyl phthalate, 2c. per lb.
Di-iso-octyl phthalate, 4c. per lb.
Dioctyl phthalate, 4c. per lb.
Molybdated organe, 1c. per lb.
Pigment green B, 5c. per lb.

Reduced

Naphthol, ITR red toner, bbls., 50c. per lb.

The plasticizers market is still concerned over the shortages of phthalic anhydride created by scarcity of naphthalene. It will be into the first quarter of next year before enough phthalic will be available to cover all the needs of the plasticizer industry.

With improvement in supplies of steel as a result of the Taft-Hartley injunction, demand for alkyd resins is likewise improving. With resumption of business in various metal fabricating and appliance companies, the largest buyers of alkyds, business is expected to improve steadily.

Exopy resins appear to have a bright business outlook, for as production volume has increased, prices have decreased, thus creating a faster growth pattern than normal. Large area of demand for the epoxies comes from fiberglass laminations.

Prime Pigments

Carbon Black—The following figures in thousands of pounds, indicate production, shipment, stocks and exports of carbon black for October, 1959, with figures for September, 1959, and October, 1958, reported for comparison:

	Furnace	Contact	Total
Production			
October, 1959	142,533	26,477	169,010
September, 1959	142,682	26,286	168,968
October, 1958	119,346	27,457	146,803
Stocks			
October, 1959	127,986	78,445	206,431
September, 1959	129,807	78,882	208,689
October, 1958	206,913	99,510	306,423
Shipments			
October, 1959	144,353	26,914	171,267
September, 1959	162,394	35,488	197,882
October, 1958	135,594	30,244	165,838
Exports			
October, 1959	*	*	*
September, 1959	44,114	19,031	63,145
October, 1958	23,701	11,234	34,935

* Figures not available.

Chrome Green—As of January 1, a major producer is advancing prices of C.P. chrome green. Changes run as follows: dark, light medium blue content 1 to 15 percent is up 1c. to 43c. per pound, barrels, delivered East of the Rockies; blue content, 16 to 30 percent, is up 2c. to 44c.; blue content 31 to 45 percent, is also up 1c. to 44c.; and blue content, 45 to 49 percent was upped 1c. to 45c. per pound. New listing for chrome green, reduced color, 25 percent, is 20c. per pound, a rise of 1c.

Molybdated Orange—Listings of this material as well is slated to climb as of the first of 1960. A major producer has advanced prices by 1c. per pound. New price schedule for molybdated orange will be 49c. per pound, for barrel quantities.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 12, 1958
103.03	103.03	103.03	103.09

For Current Prices see page 9

Naphthol ITR Red Toner—Also to join the list of January 1 price changes is naphthol ITR red toner. This time, however, the change is in the form of a decline. The material will be decreased by one of the large producers by 50c. to a new price of $5 per pound, barrels, works.

Pigment Green B—A price advance of 5c. per pound will go into effect for the material as of January 1, 1960. A major producer of Pigment green B announced that prices will be listed at $1.50 per pound, in keg quantities.

Lacquer Materials

Acrylics—Demand for these materials has been good and is expected to improve in the coming year. The automobile industry has developed new type automotive lacquers based on heat cured acrylic lacquers. These new lacquers are designed to produce so-called "mirror finishes" which are said to retain gloss and film integrity longer than any automotive finish yet produced.

Nitrocellulose—The market for various viscosity grades of nitro-cellulose can best be described as routine. Prices continue firm and unchanged, and demand is moderate against quite adequate supplies.

Competition from certain other types of finishes, particularly in the automotive trade, has resulted in some loss of business volume, partially made up in outlets in other directions, but still leaving considerable improvement to be desired. Nitrocellulose lacquers are good, moderately priced finishes and will be around for a long time as fast air dry durable protective coatings for a wide range of applications. Manufacturers of nitrocellulose do not appear to be much disturbed by healthy competition.

Plasticizers—Of most concern in the overall plasticizer market are, of course, those based on phthalic anhydride because of the scarcity of this polybasic acid created by naphthalene shortages, in turn incurred by the steel strike. This raw material pinch comes at a time when the phthalate plasticizer industry has just completed an expanding end use and growth volume which could be termed as spectacular.

Growth has been due to the need for these materials, particularly the eight carbon atom esters, for the vinyl plastics industry and other facets of the plastic sheeting business.

Sources agree that supplies are tight and there is nothing anyone can do about it but take their allocated share of what is available, and hope that the steel strike will be settled by the time the Taft-Hartley injunction period runs out.

Synthetic Resins

Alkyd Resins—Demand for these materials is beginning to improve after suffering somewhat of a setback during the fall. Fall off in business volume was attributed to cutbacks in industrial and automotive finishing as a result of steel shortages in the appliance and other metal fabricating industries. Behind this improvement is a renewed trickle of steel to manufacturing plants stemming from Taft-Hartley resumption of steel operations.

Certain automotive plants of both General Motors and Chrystler, closed because of the strike, are resuming operations, and some of the shutdown appliance

Coatings Materials

plants as well are starting to get under way. This will restore to a more normal pattern the demand for industrial finishes of the alkyd resin types as well as demand for automotive lacquers, both nitrocellulose and acrylic.

However, it is generally felt that the improved demand situation does not create an "all-is-well" atmosphere in the alkyd resins market. Despite the fact that supplies of drying oils are abundant and polyols are similarly plentiful, there is a serious scarcity of phthalic and maleic anhydrides. Phthalic anhydride is tight because of inadequate supplies of naphthalene caused by the steel strike; maleic anhydride is tight because of heavy demand for polyester resin manufacture against current lack of operating plant capacity.

Natural Resins

Shellac—Demand in both trade and industrial lines continued to be good last week. Spot market and producing areas alike have been enjoying a couple of months of calm. All price levels were unchanged. Orange lemon No. 1 grade shellac held steady at 37c. to 39c., No. 2 was priced at 34c. to 37c., and orange superfine shellac was listed at 32c. to 34c. per pound.

Miscellaneous

Casein—Price of casein in the Argentine for shipment in late December and early January has now eased to a range of 20½c. to 20¾c. per pound. There is little movement in the Argentine as that source is holding back waiting to see what the European markets will do. Recently, demand from Europe eased considerably after a summer and fall of extremely heavy demand. Stocks in the Argentine are very heavy with new production size estimated at 14,000 tons for the three producing months.

Australian market continued to be tight. It has been difficult to get offers from that source as what little is available is being grabbed up by the Japanese who have been very heavy buyers.

Naval Stores

Pine Gum—For the week ended November 28 the average price per standard barrel of commercial crude in gum was reported at $28.10 as compared to $28.10 the previous week and $23.10 a year ago. The volume of gum deliveries to plants totaled 14,200 as against the previous week's 14,395 and 16,400 a year ago. Content per barrel included an average 7.97 gallons of turpentine and 297.6 pounds of rosin. Gum grading percentages ranged as follows: WG, 2; N, 38; M, 46; and K and below, 14.

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Dec. 4	Mon. Dec. 7	Tues. Dec. 8	Wed. Dec. 9	Thurs. Dec. 10
Drums—					
K	$10.25	...	...	...	...
M	...	$9.90	...	...	$10.41
N	10.40§	10.00	...	...	10.41
WG	...	10.10	...	...	10.41
WW	11.20	11.25	$11.50	...	...
Bags—					
K	10.40§	10.25§	10.91§[1]	...	...
M	...	10.40	...	...	...
N	...	11.33	...	...	...
WG	...	11.35	...	...	...

Tankcars (for week ended December 11)—
M or better, $9.40; K or better, $10; M, $9.80

Sales, USDA

	2,209*	1,369*	1,396*	2,251*	2,016*

New York
(Per 100 lbs., c.l., Friday)
WW, $12.50; WG, $12.25; N, $11.50; K-M, $11.40

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	...	.53	...	...	...
Sales	...	6,000¶	...	...	...

* Drums equivalent. ¶ Gallons. § Average price.
[1] Or better.

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Get it Straight . . . . . .
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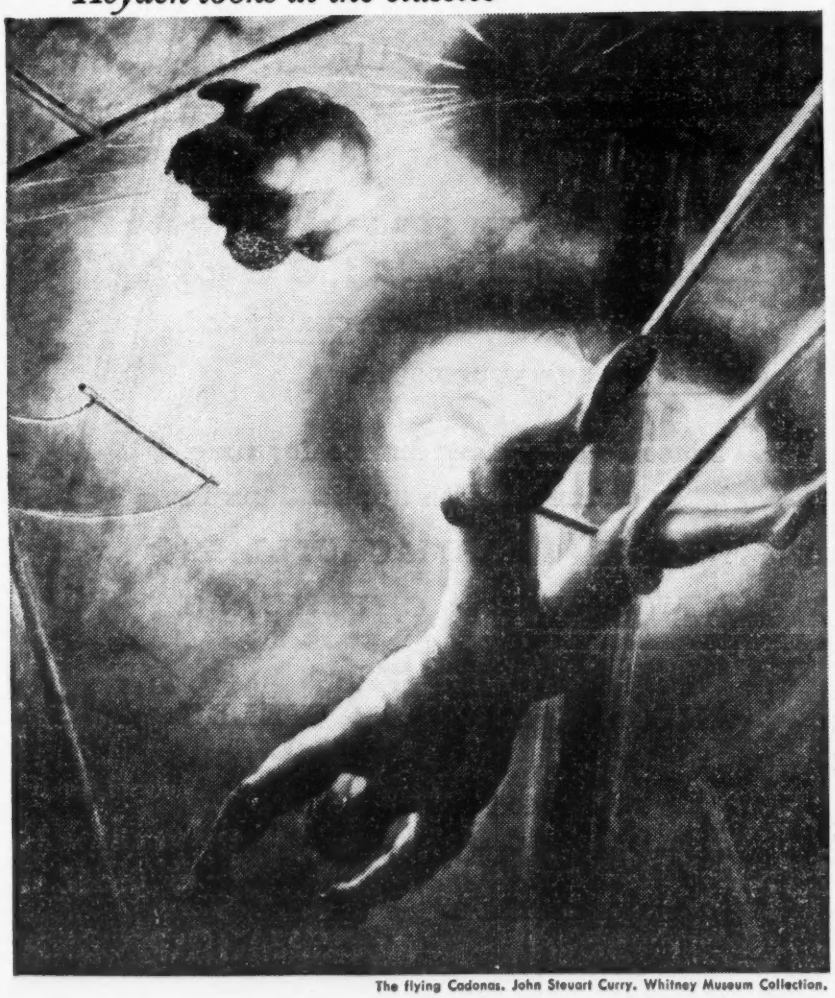

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HEYDEN CHEMICAL DIVISION
Heyden Newport Chemical Corporation
342 Madison Avenue, New York 17, New York

Trade Name Chemicals

—Continued from page 49

and markedly delays chalking and yellowing.

Onyx Oil & Chemical Company is producing a new germicide-fungicide trade named **"Isothan Q-75."** An amber, hydrophylic liquid with a pleasant characteristic odor, chemically, **"Isothan Q-75"** is a 75 percent concentrate of n-alkyl isoquinolinium bromides. Soluble in a wide range of polar solvents, it is also cationic in nature and thus should not be compounded with anionic detergents or emulsifiers.

According to Onyx, **"Isothan Q-75"** exhibits activity against many representative fungi. Fungistatic levels are easily demonstrated below 10 ppm. Several of the fungi found susceptible to **"Isothan Q-75"** in recommended use dilutions are: candida albicans, aspergillus niger, and trichophyton interdigitale.

Among the applications suggested by Onyx, **"Isothan Q-75"** is said to be good in dandruff control rinses. Used as an agricultural fungicide, **"Isothan Q-75"** is said to be compatible with oil, lead arsenate, nicotine, and DDT. It has been used, continues Onyx, as a protective and eradicant agent against apple scab at a dilution of 4.3 ounces to 100 gallons of diluent.

Thickening, Suspending Agents

"Jaguar" is the trade name given to guar gum by Stein Hall & Co., Inc. Guar gum is a polysaccharide consisting of a complex carbohydrate polymer of galactose and mannose and is chemically classified as a galactomannan. Stein Hall's **"Jaguar"** is said to be a lot more than just guar gum; it is a complete line of processed guar gums available in a variety of types.

A free-flowing whitish powder, Stein Hall says that **"Jaguar"** can be kept in its dry form indefinitely without fear of spoilage or deterioration. Analysis of **"Jaguar"** shows that it contains 80 percent galactomannan, 5 percent protein, 2 percent crude fiber, 0.8 percent ash, 0.6 percent ether extract, no arsenic, no heavy metals, and trace iron.

According to Stein Hall, the straight-chain nature of the guar molecule and the company's processing techniques have made possible many of the properties exhibited by **"Jaguar."** For example, **"Jaguar"** can be prepared in grades varying from extremely rapid to extremely slow hydration rates. Furthermore, although **"Jaguar"** is a cold water swelling colloid, use of higher temperatures is said to result in shorter hydration times and higher viscosities. Another feature of **"Jaguar,"** continues the company, is its good stability toward prolonged heat at 80°C.

Stein Hall goes on to say that due to the fact that **"Jaguar"** is a natural polyelectrolyte, it is compatible with electrolytes over a wide range of concentration and pH. Also, fluid solutions, strong gels or loose, stringy gels can be obtained by varying the pH and electrolyte concentration. Beyond this, the company claims that **"Jaguar"** is compatible over the entire pH range; this is attributed to the nonionic character of the **"Jaguar"** molecule. Finally, Stein Hall states that their product has the ability to form rigid, acid reversible gels with borate ions, and the ability of the molecule to hydrogen bond with either hydrated mineral or cellulose surfaces.

Burtonite Company also produces a guar gum thickening agent called **"Burtonite V-7-E."** The company describes it as being an edible vegetable colloid, a polysaccharide or mannogalactan from leguminous seeds. Characteristics listed for **"Burtonite V-7-E"** include the fact that it is a whitish powder in form, it has good storage stability, and in its dry form it is said to be free from spoilage for long periods of time.

"Burtonite V-7-E" is said to have many applications. Burtonite says that it is particularly of use in foods of all kinds. In sausages and prepared meats **"Burtonite V-7-E"** serves as a binder and lubricant facilitating mixing and stuffing operations. Amount of **"V-7-E"** employed, continues Burtonite, ranges from 0.2 to 0.5 percent on weight of meat in mix. In fruit juices, Burtonite says that **"Burtonite V-7-E"** is used for viscosity control.

Another large area of use for **"Burtonite V-7-E"** is pharmaceuticals. Being wholly edible and being quickly soluble in cold water, Burtonite says that **"V-7-E"** is making an inroad into the starch market as a binder of tablets. Furthermore, the thixotropic character of **"V-7-E"** water solutions is said to have made it a desirable component in aqueous mixtures for viscosity control and suspension of solids. Burtonite also says that when water phase of aqueous medicines needing viscosity control is small and high speed mixers are not available, **"V-7-E"** can be dispersed in alcohol in which it will not swell or dissolve.

The current market price of food grade guar gum is 38c. per pound, bags, carlots; for industrial grade, bags, carlots, the price is 32c.; and for technical guar gum it is 30c. to 33c. per pound.

PVA Latex Paint Container Is Made By Continental Can

Continental Can Company has developed a polyvinyl acetate latex paint can which eliminates the need for interior lacquer. The new can, according to tests, will be as rust-free when filled as any inside-lacquered container now being manufactured.

The principle of the new container is based upon material used in the manufacture of the container which acts as a "scavenger" and absorbs oxygen which may be present in a paint-filled can.

Continental already has successfully tested PVA paint formulas known to be extremely corrosive and difficult to hold in a metal container.

POLYVINYL CHEMICALS

Specialists In Emulsion Polymers

New Light Colored Modified Polystyrene Emulsion For Floor Polishes

NeoRez S-71

Formulators anxious to achieve new lightness of color for their floor polishes will welcome this new emulsion. In addition to its exceptional light color, NeoRez S-71 imparts excellent gloss and leveling properties. It is highly stable, and has an unusually wide compatibility with waxes and resins.

Widely Used —Time Proven

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Used by many formulators for many years, NeoRez ST provides superior leveling, minimizing "crawling" and "puddling", even on difficult substrates. It imparts a rich, deep gloss and exceptional resistance to dirt. In formulating, NeoRez ST has low plasticizer requirements.

Write for samples and new comprehensive bulletin.

POLYVINYL CHEMICALS, INC.
26-4 Howley Street, Peabody, Massachusetts

CSMA Positions Go to Fiero and Hamilton

—Continued from page 7

& Son, Inc., Racine, Wis., forecast that the self-polishing floor wax of the future—one with vastly superior characteristics to those now on the market—will be developed through the "synthesis of a single molecular structure in the form of an emulsion polymer."

Dr. Steinle told CSMA that properties built into a single molecule polymer emulsion will provide a self-polishing floor wax that will have a higher gloss than present products, resist wear under normal traffic for several months, regain its initial gloss with rebuffing, will be impervious to spotting by water or even soap but which will be readily removable by the addition of a simple common chemical to the wash water.

Building all of these characteristics into a single molecule, he pointed out, will require careful application of both physical and organic chemistry. He said that further work will be needed to develop a final formula and processes for factory production.

Marketing a Chemical Specialty

Some basic rules on the marketing of chemical specialty products were laid down for CSMA by Dr. Edwin I. Stoltz, technical director of Adell Chemical Company, Holyoke, Mass.

Dr. Stoltz offered these four suggestions in advertising a chemical specialty:

Make sure that all TV commercial or other advertisements are factual.

At no time should any comparisons be made with another product or products.

All statements should be of a positive nautre.

Since television enters people's living rooms, the approach must be a soft one and one that will not antagonize the viewer.

In selling a chemical specialty, he went on, there also should be no comparisons with other products. He likewise warned against high-pressure selling and the offering of free goods.

Dr. Stolz urged that fair trade be maintained that that there be one price for all.

Glycols in Drug Aerosols

Dr. P. A. Sanders of the E. I. duPont de Nemours & Co., Wilmington, Del., reported that glycols, glycol-ethers and polyglycols show promise as solvents for pharmaceuticals in aerosol formulations, particularly as substitutes for ethyl alcohol which sometimes causes an undesirable cooling effect or irritation in skin applications.

Dr. Sanders, who is with duPont's "Freon" products laboratory, pointed to these logical applications: topical anesthetics, antiseptics, burn preparations, antibiotic preparations and similar products for external application.

Because of their relatively low toxicity, he added, the glycols also should be useful in the formulation of cosmetic items.

Besides Dr. Fiero and Mr. Hamilton, CSMA elected these other officers:

First vice-president, Charles E. Beach of John C. Stalfort & Sons, Inc., Baltimore, Md.; second vice-president, Charles E. Allderdice, jr., of the Bell Company, Chicago; treasurer, Frederick G. Lodes of Lodes Aerosol Consultants, Inc., New York, and secretary, A. A. Mulliken.

Elected to three-year terms on the association's board of governors were.

Donald M. King of Masury-Young Company, Boston, Mass.; Peter C. Reilly of Reilly Tar & Chemical Corporation, Indianapolis, Ind.; Joseph E. Lee of McLaughlin Gormley King Company, Minneapolis, Minn., and Joseph J. Tomlinson of General Chemical Division, Allied Chemical Corporation, New York.

The grand award in CSMA's 1959 aerosol packaging competition went to "Qwip" dessert topping, a product of Avoset Company, Oakland, Calif. "Qwip" was also awarded top honors in the food products classification.

Synthetics in Textiles

—Continued from page 5

fibers as well as natural materials), wages, financing and buildings and equipment in the United States and in major producing foreign countries.

Countries will be chosen for the study according to the fabrics they produce. It is expected that Japan and the United Kingdom will be included.

The survey, which is being conducted under contract by Surveys & Research Corporation, Washington, D.C., will include field studies at home and abroad and is the third in a BDSA series dealing with textile problems.

A fourth study, now under negotiation by the agency, will cover the long-term trends in textiles as affected by the competition of alternate materials such as plastics and paper, changes in population and purchasing power.

In progress are two other textile surveys, one covering the demand for work clothing in the United States and the other dealing with the basic causes of periodical fluctuations in production and pricing of textiles.

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- Complete range of types
- Experienced technical service

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- Retaining moisture, perfumes and flavors in powdered products.
- Preventing caking in plastic molding compounds, fertilizers, detergents, tooth powder, feed supplements, etc.
- Catalyst and catalyst carrier

PROPERTIES OF AICCO-SOL

Density, gm./cc.	2.04
Specific Area	600 sq.m./g.
Refractive Index	1.500-1.515
Pores: Volume	630 ml./g.
Avg. Dia.	33 A°
Distribution	Uniform
pH of 10% slurry	7.5-8.5

Reactions: Water adsorbed; no change in volume.
Weak acids removed by adsorption.
Strong acids dissolve it.
In salts, heavy metal ions displaced.
In bases, no reaction.

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We mean you can't miss getting the *uniform quality* and *consistent performance* that you—and your production and sales people—want in your products. But we'd rather practice quality than talk about it. Next time, specify Emery Tallow Fatty Acids, and see for yourself.

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Oils, Fats and Waxes

Feature of a dull fats and oils market last week, was the upward trend of crude coconut oil, which was boosted 3/8 cent per pound on the Pacific coast and New York. Offers for shipment were scarce and firmly held. Offerings of copra were scarce and firmly held. Trading, however, was reported light. Corn oil was firmer and sold at 3/8 cent higher. Cottonseed oil was quiet and unchanged. Peanut oil was weak and light sales took place at ½ cent decline. Soybean oil was dull and featureless and closed unchanged. Reports from Spain stated that the government was about to lift minimum prices on shipments, also cancel export licenses. This news was received with interest by trade observers who felt that the move would result in bringing trading out in the open.

Trading in tallow and greases was light and spotty. Prices were easy and shadable, but market closed steady following improved interest for export and for spot delivery.

In industrial oils, a moderate trade in Brazilian castor oil was reported at the recent advance. Oiticica also received more attention for prompt needs, which kept this market strong. Linseed oil was quiet and unchanged. Tung oil was steady, with light sales reported for prompt delivery.

World olive oil output for the current crop year is estimated at 1.1 million tons, including oil from olive residues, which accounts for about 10 percent of the total volume, according to the Food and Agriculture Organization of the United Nations. Thus a tight supply situation was avoided for the third crop year in succession, but largely due to the chance of off-setting fluctuations in individual countries around the Mediterranean Basin. European olive harvests ending in the spring of 1959 were much smaller than in the previous year, and olive oil output was slightly below 800 thousand tons, nearly 30 percent down. The sharpest decline occurred in Italy where oil production, although better than in some previous "off-years," was 264 thousand tons as compared with 400 thousand tons in 1957-58. Output of solvent extracted oil is estimated at 35 thousand tons. The poorest results were reported from the southern Italian growing regions. The Spanish crop was average by the standards of recent years although the 330 thousand tons of oil produced were 12 percent less than in 1957-59. Output in Greece (111 thousand tons) and in Portugal (66 thousand tons) was reasonably good, but lower than last year as anticipated.

By contrast, crops in other major countries around the Mediterranean were reported as very good. The long term upward trend in Tunisia combined with very favorable growing conditions resulted in record supplies, excluding carryover, of 135 thousand tons, nearly treble the output of the previous season. In Turkey a peak volume of 90 thousand tons was reported, double 1957-58 output. Both Algeria and Morocco harvested crops which were heavy, but smaller than expected due to bad weather, pests and, in Algeria, generally unsettled conditions.

Price Trends

Advanced

Candelilla wax, crude, 5c. per lb.
Refd., 5c. per lb.
Coconut oil, crude, ¾c. per lb.
Corn oil, crude, ¾c. per lb.
Refd., ¾c. per lb.
Linseed meal, $1 per ton.
Oleo oil, ½c. per lb.
Soybean meal, $2 per ton.

Reduced

Cottonseed meal, $2 per ton
Lard, cash, ½c. per lb.
Peanut oil, crude, ½c. per lb.
Refd., ½c. per lb
Rice bran oil, ½c. per lb.
Soybean oil foots, 95%, ½c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Dec. 12, 1958
123.32	122.39	122.58	116.86

For Current Prices see page 9

Vegetable Oils

Castor—Firm tone prevailed in this market, reflecting the high cost of replacements. Trading was spotty. No. 1 Brazilian ranged from 17¾c. to 18c. per pound, tankcars, New York, prompt delivery, as to seller. Demand for domestic oil was light, but was firmly held at current quotations.

Imports of castor beans and castor oil

Oils and Fats: October

Following statistics are compiled by the Bureau of Census covering oils and fats production, consumption and factory and warehouse stocks in October, 1959 (in millions of pounds).

	Cottonseed Oil	Soybean Oil	Corn Oil	Peanut Oil	Lard	Edible Tallow
Production:						
Crude oils	263.0	391.2	27.3	[1]5.9	[1]238.0	23.2
Refined oils[2]	143.1	272.9	23.6	6.5	xxx	xxx
Consumption in refining[3]	154.2	234.1	25.9	7.1	xxx	xxx
Consumption in selected edible and inedible products[3], total	98.5	266.6	25.7	6.2	51.1	22.0
Stocks, end of month[3], total	311.6	321.4	26.2	10.4	80.4	19.2
Crude oils	150.5	165.4	17.8	5.3	xxx	xxx
Refined oils	161.1	156.0	8.4	5.1	xxx	xxx

Note: Total consumption of oils in each end product may exceed sum of detail since only major edible oils are shown separately.
[r] Revised.
D—Withheld to avoid disclosing figures for individual companies.
[1] Source, U. S. Department of Agriculture. Lard production represents quantities rendered.
[2] Production of refined oils covers only once-refined oil. Degummed soybean oil is reported as crude oil.
[3] Includes hydrogenated fats (vegetable and animal) and other fats and oils "in process," (e.g. refined cottonseed includes stocks of stearin).

	Coconut Oil	Linseed Oil	Inedible Tallow & Grease	Tall Oil	Vegetable Foots
Production:					
Crude	43.9	60.2	[2]268.2	69.6	22.6
Refined[2]	31.0	(NA)	xxx	11.5	xxx
Consumed in refining[3]	32.9	19.6	xxx	(D)	xxx
Consumption in selected edible and inedible products[1], total	[r]47.3	30.5	153.8	58.8	11.3
Consumption in inedible products, total	33.9	30.5	153.3	58.8	11.3
Stocks[4]	51.1	134.7	333.1	141.4	34.3
Crude oils	39.6	[5]94.9	xxx	123.8	xxx
Refined oils	11.5	[6]39.8	xxx	17.6	xxx

[r] Revised.
D—Withheld to avoid disclosing figures for individual companies.
NA—Not available.
[1] Quantities rendered.
[2] Production of refined covers only once-refined oils. Tall oil used in refining excludes quantity used in fatty acids.
[3] Includes hydrogenated fats (vegetable and animal) and other fats and oils "in process."
[4] Includes following amounts consumed as crude in October and September respectively: 17.8 and 16.8.
[5] Includes raw and boiled linseed oil.
[6] Includes linseed oil other than raw and boiled.

	Castor Oil	Tung Oil	Palm Oil	Palm Kernel Oil	Fish Oil	Marine Mammal Oil
Production:						
Crude	(D)	....	xxx	....	11.6	0.2
Refined	xxx	xxx	xxx	6.1	xxx	xxx
Consumed in refining[1]	xxx	xxx	xxx	6.8	xxx	xxx
Consumption in selected edible and inedible products[2], total	9.8	2.7	2.1	10.4	3.6	2.2
Consumption in edible products	(D)	.	(D)	6.3	.	.
Consumption in inedible products	(D)	2.7	(D)	4.1	3.6	2.2
Stocks (crude and refined)[2]	30.5	38.5	13.4	7.7	78.9	51.6

D—Withheld to avoid disclosing figures for individual companies.
[1] Production of refined covers once-refined oils.
[2] Includes hydrogenated fats and other fats and oils in process.

Oils, Fats and Waxes

at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	.....	800,000
Previous week	220,800	2,000,000
Corresponding week, 1958	.....	2,700,000
Total last year	24,569,300	91,572,000
Corresponding period, 1958	18,136,500	69,885,000

Coconut—Firmer tone featured this market. Offers of crude were light and advanced to 17c. per pound, tankcars, f.o.b. Pacific coast for December-January shipment. The New York also was higher at 18⅝c. to 18¾c., tankcars, for prompt delivery. Trading was reported inactive.

Corn—Crude was stronger, with sales reported up to 11⅝c. per pound, tankcars, f.o.b. mills, for prompt delivery. Refined oil also was higher and held at 15.35c., tankcars, New York basis.

Cottonseed — Futures market lacked new feature and backed and filled, registering slight declines on the New York Produce Exchange last week. Trading was moderate and fluctuations were narrow. Liquidation was not heavy, but sufficient to unsettle the market. Trade interest continued to absorb December and sold May forward which were taken by professionals. December tenders were increased to 231 contracts and stopped. Cash markets were quiet and unchanged. Refined salad was quoted at 12⅛c. per pound, tankcars, New York, prompt delivery.

Trading in crude cottonseed oil was spotty. Sales were reported at 8⅞c. per pound, tankcars, f.o.b. mills in the Valley, prompt shipment. Prices were nominal at 9⅛c. to 9¼c., in the southeast and 9c. sales, Waco.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, December 11, follow:

	Sales	High	Low	Close
		Cents per Pound		
Dec.	52	11.05	10.90	10.90@10.96
March	133	11.37	11.14	11.15@11.16
May	197	11.54	11.31	11.33@11.34
July	202	11.62	11.41	11.42S
Sept.	14	11.47	11.32	11.30@11.34
Oct.	14	11.35	11.16	11.16@11.18
Dec. (1960)	2	11.25	11.20	11.00@11.20
March (1960)	3	11.20	11.20	11.20@11.23
May	1	11.30	11.30	11.20@11.25

Total sales and switches, 619 contracts.

Exports of cottonseed oil under PL 480 were placed at 141 million pounds, October 1, 1958 through September 30, 1959 compared with 97 million pounds for the previous year. Total exports for the same periods amounted to 404 million pounds and 248 million pounds, respectively.

The government's final estimate of the cotton crop this year was indicated at 14,701,000 bales, an increase of about 28 percent over 1958 production of 11,512,000 bales. The 10-year (1948-57) average production is 14,146,000 bales. If the ratio of lint to cottonseed is the same as the average for the past five years, production of cottonseed would be 6,100,000 tons compared with 4,798,000 tons in 1958.

Flaxseed — Seed was quiet and unchanged at $3.60 per bushel, basis, Minneapolis. Few cars were traded at 3c. premium, but bulk of sales were made at market price.

Linseed—CCC, Cincinnati office rejected all bids for 2,000,000 pounds of linseed oil last week, because bids were too low. The agency will resubmit this quantity this week and accept bids up to Tuesday. Acceptance or rejections will be announced not later than Thursday midnight.

Demand was light, chiefly for actual needs. Withdrawals of oil against contract has slackened as is usual at this season. Raw oil was held at 14½c. per pound, tankcars, f.o.b. Minneapolis, December-February delivery; 14.7c., March-May; 14.9c., June-July, same basis. Tankcars exwarehouse were recently reduced to 15.61c. per pound, because of the lower freight rate from Minneapolis to New York.

Olive—Trading was slow. Prices were steady on spot and for shipment. Spanish oil ranged $48 to $51 per 100 kilos, drums, f.o.b. ports, as to time of shipment. Reports from Spain stated the government was expected shortly to abolish minimum prices and export licenses. Stocks on spot were quiet and unchanged. Spanish and Tunisian oils were quoted at $2.30 to $2.40 per gallon, drums, duty paid, as to seller and quantity.

Peanut—Crude was weaker, declining ½c. per pound. Sales were noted at 13c. per pound, tankcars, f.o.b. mills. Refined oil declined to 16¼c., tankcars, New York basis.

Soybean—This market was quiet. Crude was quoted at 7⅞c. per pound, tankcars, Decatur for December delivery. January was nominal at 8c., same basis. Refined salad was inactive and offered at 10c. per pound, tankcars, New York, prompt delivery.

Soybean oils exports under PL 480 amounted to 747 million pounds, September 1, 1958 through September 30, 1959 against 592 million pounds for the previous year. Total exports during the same periods were 941 million pounds and 803 million pounds, respectively.

The Department of Agriculture has announced that soybeans acquired under the price-support operation have been withdrawn from the list of commodities available for barter transactions, effective Dec. 5.

Tung—Demand continued for actual needs. Sales of imported oil were reported at 22⅜c. and 22¼c. per pound, tankcars, New York, prompt delivery. Market was steady. Drums were un-

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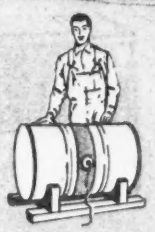
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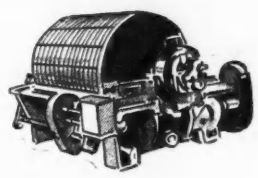

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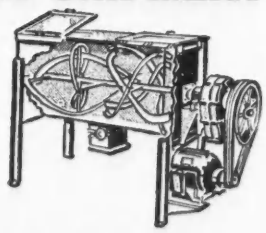

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FMC

Oils, Fats and Waxes

changed at 23¾c. to 24¼c. per pound, spot as to quantity. Domestic oil was nominal at 21½c., tankcars, f.o.b. mills.

Miscellaneous

Copra—Market remained firm. Offers for shipment were scarce with sales at $225 per short ton, c.i.f. Pacific coast, January arrival.

Fats and Greases

Greases—Trading was slow, and confined to actual needs. Prices were slightly lower, but closed steady. Choice white grease ranged from 6¼c. to 6⅜c. per pound, tankcars, delivered and yellow grease, 6¼c. to 6⅜c., same basis, as to acid content.

Lard—Market was dull and lower. Cash lard declined to 7½c. per pound, drums, Chicago.

Tallow—Moderate demand steadied the market after sales took place at slightly lower levels. Bleachable fancy sold at 6c. and 6⅛c. per pound, tankcars, delivered. Prime ranged from 5¾c. to 5⅞c.; special, 5¼c. to 5⅜c.; No. 1, 4¾c. to 4⅞c., same basis, depending upon quantity. Edible tallow was easy and quoted at 8⅝c. to 8¾c., same basis. Export business was limited. Guaranteed fancy ranged from 7¾c. to 7.80c., per pound, drums, f.a.s. and bulk, 6½c. to 6⅝c., f.o.b.

Fish Oils

Menhaden—Trading in crude was reported quiet though refiners showed good inquiry in replacements. Crude was maintained at 7¼c. per pound, tankcars, f.o.b. mills. Production has ceased for the season, except off the Carolinas, where the catch was reported moderate last week. Refined oil was firm. Light pressed oil was maintained at 10c., tankcars, New York basis.

Cake and Meal

Cottonseed Meal—Trading continued slow. Prices were down from the recent high. Oil mills have sold ahead to keep meal moving fairly well. Meal 41 percent meal was lower at $64 per ton sacked Memphis; $67 Alabama; $68 Georgia and $68 to $70 Carolina area for December-January shipments.

Linseed Meal — Crushers advanced prices $1 per ton for nearby delivery, but limited resale offers were available at less. Inquiry for meal increased slightly on improved feed business. Extracted meal, 34 percent was quoted at $74 per ton, Minneapolis, December shipment and $75 for January-March. Old process meal was unchanged at $78.50 per ton, December-March.

Soybean Meal—Market rallied, reflecting improved demand from the feed trade. Buying was quite active in the East and South. Unrestricted delivery was higher at $59 per ton, December shipment.

Waxes, Vegetable

Candelilla wax remained in a strong position due to the scarcity of stocks on spot, which were again boosted 5c. per pound. Arrival of replacements from Mexico continued uncertain and may not reach here until sometime next month, according to sources. Small lots of crude on spot were in firm hands and raised to 60c. to 62c. per pound, as to seller and refined pure to 65c. to 67c., same basis.

While demand for carnauba grades was light on spot, the market continued steady at unchanged quotations, due chiefly to strength of replacements from Brazil. No. 3 Ceara crude was held at 76c. to 78c. per pound, spot as to quantity with Parnahyba, 2c. higher. No. 1 yellow ranged from $1.14 to $1.18 per pound, according to delivery, with sales reported at $1.17 for spot, stocks. No. 1, yellow Parnahyba was held at $1.16 to $1.20, same basis.

Crude beeswax was firm reflecting the strength of primary markets. Bleachable grades were scarce and nominal. African, crude was in light supply and held at 53c. to 55c. per pound, depending upon quantity.

MCA Leaping Boundaries

—Continued from page 5

ing executives of MCA member companies' international organizations. The following are members:

Chairman, T. G. Hughes, Oronite Chemical Company; vice-chairman, G. W. Naylor, chairman, Koppers Company; H. A. Arnold, Olin Mathieson Chemical Corporation; C. B. Branch, Dow Chemical Company; W. S. Carpenter, 3rd, E. I. du Pont de Nemours & Co.; H. R. Helbig, Reichhold Chemicals, Inc.; C. G. Hurlimann; Chas. Pfizer & Co.

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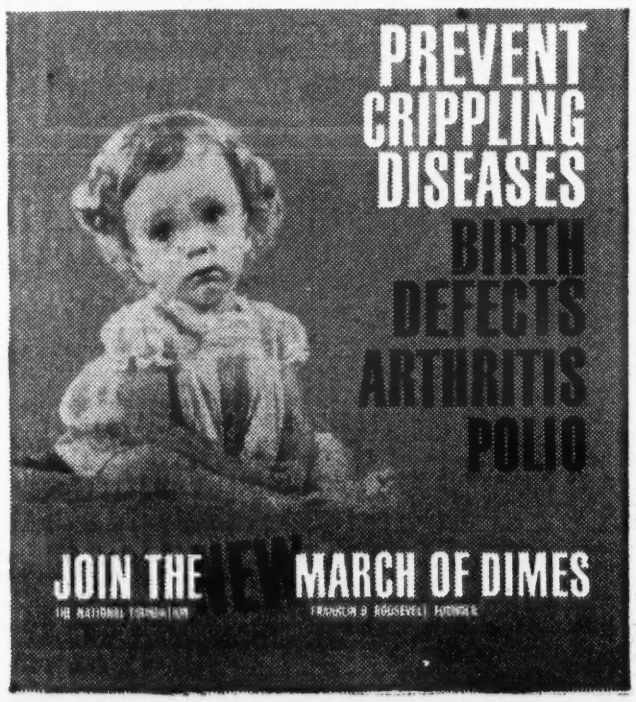

Chemical Money Around?

—Continued from page 5

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4—Sharples C20 Super-D-Hydrators, 316 S.S.
1—Sharples PN14 Super-D-Canters, 316 S.S.
1—AT&M 26" susp. Cent., perf. bskt. 316 S.S.
1—Oliver 8' x 8' Precoat rubber covered Rotary Vacuum Filters.
5—Sperry 36" plate & frame Filters, rubber covered, and wood.
5—8' dia. x 24' rubber lined Crystallizers.

PULVERIZERS AND MILLS

2—Abbe 5' x 16' brick lined Mills.
2—30" dia. Stainless Steel Micronizers complete with Hoppers, Conveyors, etc.

STEEL TANKS

6—2000 to 5200 gal. with Turbo Agitators.
15—Storage Tanks: 3800; 4000; 9000; 10,000; 15,000; 47,000 gals.

KILNS AND DRYERS

1—Traylor 11' x 155' Rotary Kiln, ⅞" shell.
1—Renn 4' x 40' Rotary Kiln, ⅝" shell.

RUBBER LINED TANKS

5—8500 gal. Vertical Storage 8' 6" x 16' x 8' cone.
1—13000 gal. Horizontal Storage 8' x 35'.

MISCELLANEOUS

7—Dorr Thickeners: 16' dia. with Tanks.
1—Bemis 50# Bag Packer with Sewing Machine, Conveyor and Flattener.
58—LaBour, Durco, Worthite, Duriron and Stainless Steel Centrifugal Pumps 2" to 6" with motors.

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Representatives on Premises, 2701 Broening Highway, Baltimore, Md.
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BRILL EQUIPMENT COMPANY
35 JABEZ STREET, NEWARK 5, N. J.
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SPECIALS

11—Rotary Dryers: 8' x 87', 7' x 80', 7' x 55', 6' x 60', 6' x 50', 4' x 40', 4' x 30', 34" x 30'.
2—Allis Chalmers 8' x 100' Rotary Kilns.
2—Louisville 8' x 50' S.S. Rotary Dryers.
1—Louisville 4'6" x 40' Aluminum Rotary Steam Tube Dryer.
1—Louisville 54" x 35', Monel Rotary Steam Tube Dryer.
2—Link Belt 6'4" x 24' S.S. Roto Louvre Dryers.
1—Oliver 6' dia. Horizontal Filter, 316 S.S.
1—Sharples C-27 Super-D-Hydrator 316 S.S.
1—Niagara #370-38 Filter, 370 sq. ft., 304 S.S.
1—Nash H10 Hytor Vacuum Pump, 1500 cfm.
1—Buflovak Monel Evaporator: 550 sq. ft.
3—Struthers Wells 2000 gals. 316 S.S. jacketed, agitated Reactors.
1—Pfaudler 1000 gal. glass lined jacketed, agitated Reactor.
1—#5 Mikro Atomizer, S.S.
3—Swenson Walker Crystallizers 30' long.
1—Stokes R4 Preform Press.
2—#49 Vallez Rotating Pressure Filters, 738 sq. ft.
1—National 8' x 80', 304 S.S. Apron Conveyor Dryer.

REACTORS — EVAPS — CONDS — TANKS

1—1400 gal. Blaw-Knox steel jktd. agtd. Reactor.
1—Unused Pfaudler 200 gal. 316 S.S. jacketed agitated Reactor with 120 sq. ft. Condenser and packed column.
1—7500 gal. 316 S.S. Vert. Storage Tank 7' x 25', 50 psi.
1—750 gal. nickel clad Mixing Tank, 125# internal with nickel coils.
1—4000 gal. Haveg 60 Vertical Tank 8' x 12'.
1—12,000 gal. horiz. steel Tank 7'6" x 36', 200 psi.
8—Stainless Heat Exchangers: 1220, 942, 536, 396, 315, 250, 157 sq. ft.
1—24" dia. x 35', 304 S.S. Bubble Cap Column.
1—30" dia. x 20', 304 S.S. Bubble Cap Column.

CENTRIFUGES

1—Bird 18" x 28", 316 S.S. Solid Bowl, Cont.
1—Bird 18" x 28", steel, Solid Bowl, NEW.
1—Bird 36" x 50" 347 S.S. Solid Bowl Continuous Centrifuge.
2—Sharples PY14, PN14, Super-D-Canters, 316 S.S.
1—Bird 40" suspended, 347 S.S., perf. basket.
2—Sharples #16, 304 S.S., 3 HP motor.

FILTERS

1—Oliver 3' x 6' Steel Rotary Vac. Precoat Filter.
1—Oliver 5'3" x 8' Steel Rot. Vac. vapor-tite housing.
1—Sparkler 33S28 Filter 150 sq. ft., 304 S.S.
1—Niagara 36H110 horiz. Filter 110 sq. ft. 304 S.S.
2—#10 Sweetland, 27 leaves, 4" centers, 250 sq. ft.

DRYERS

3—Buflovak Vac. shelf, 20—60" x 80" shelves.
1—Devine Vac. Shelf, 10—40" x 43" shelves.
2—Devine 5' x 12', 4' x 9' Atmospheric Single Drum.
1—Buflovak 3' x 20' Rotary Vacuum, 316 S.S. Unused.
2—Louisville Rotary Steam Tube, 6' x 25', 6' x 50'.
1—Traylor 30" x 18' S.S. Rotary Dryer.

MIXERS

1—#12 Sturtevant 304 S.S. Rotary Mixer, 450 cu. ft.
1—Readco 200 gal. S.S. jacketed, double arm.
1—Baker Perkins #16TRM 150 gal. jktd. sigma blades, Vacuum, 60 HP.
5—Day "Cincinnatus" double arm, 250 & 100 gal.
2—1500# Powder Mixers, 7-½ HP XP motors.
3—Steel jktd. Powder Mixers; 225, 350 cu ft.

MISCELLANEOUS

8—Stokes DD2, DDS2, T, "R", RD-3, "F" Tablet Presses.
2—Robinson Sifters, 40" x 84", Stainless.
3—Robinson Gyratory Sifters 30" x 104", triple deck.
25—Chlorimet, Durimet, and Duriron Centrifugal Pumps 1½" to 6".

Partial List of Values — Send for News Flash!

TEXAS OFFICE: 4101 San Jacinto Street, Houston 4, Texas — Tel.: JAckson 6-1351

BRILL EQUIPMENT COMPANY
35 JABEZ ST., NEWARK 5, N.J. Tel.: MArket 3-7420

IN STOCK

1—Patterson 6′ x 8′ porcelain pebble mill, 50 HP.

2—Patterson 8′ x 10′ buhrstone pebble mills.

1—Crosley 6′8″ x 7′ buhrstone pebble mill, 20 HP.

1—Porter 6′ x 5′ buhrstone pebble mill, 15 HP.

1—Abbe #2B 5′ x 6′ buhrstone pebble mill, 20 HP.

1—Kennedy 4′ x 8′ ball or rod mill, 50 HP.

1—Ross 6″ x 14″ 3-roll hi-speed mill, 5 HP.

1—2500 gal., T316 SS pressure tank, 70# WP, 7′ dia. x 7′ high, ¼″ shell & dished heads. Lightnin' 3 HP prop. agitator.

7—2600 gal. T316 SS vert. tanks, 7′ dia. x 8′ high, dished top, flat bottom, ¼″ shell, 5 HP Paddle agit. & int. coils—19# W.P.

1—J. H. Day 38 cu. ft. jktd. ribbon mixer, T316 SS.

1—Sturtevant #9 rotary blender, 150 cu. ft., UNUSED.

1—Sprout-Waldron 325 cu. ft. ribbon mixer, UNUSED.

4—Stokes tablet presses, rotary or single punch: T, R, DDS-2, RD-4.

2—Kux #25 rotary tablet presses, 25 punch.

1—Baker Perkins #16-JYEM2, 150 gal., sigma blade jktd. mixer, 1953.

68—Baker Perkins #17, 200 gal. dbl. arm jktd. mixers.

2—96″ dia. Vulcan T316 SS bubble cap columns, 30 trays on 12″ centers, 272 caps per tray.

5—A.T.&M. 40″ T304 SS Suspended centrifugals, 40 HP motors. (Solid or perf. basket.)

1—Bird 40″ susp. cent., steel solid basket.

23—Sharples #AS-16 Super centrifugals, Inconel bowls & covers, 3 HP TEFC motors.

2—Buflovak 42″ x 120″ double drum dryers, ASME 125# drums.

2—Graver 750 gal. T304 SS Kettles, ASME, 10 HP XP turbine agit.

1—1300 gal. T304 SS jacketed kettle, 5 HP XP agit.

2—4′ dia. spray dryers, T304 SS, pilot size, elec.

2—Mikro #3W pulverizers, UNUSED.

1—Niagara #510-28 filter, 510 sq. ft., T316 SS.

1—Alco 110 sq. ft. vertical leaf filter, T316 SS.

2—Oliver 5′3″ dia. x 3′ face rotary vac. filter, precoat, T316 SS. ASME 30# pressure housing.

1—Oliver 5′3″ dia. x 8′ face rotary Vacuum filter—UNUSED. Steel construction.

75—T316 SS heat exchangers & condensers: 2000 sq. ft. down to 30 sq. ft.—All sizes.

1—17,650 gal. T316 SS tank, 9′ dia. x 36′ long, ¼″ shell, ⅜″ dished heads, internal coil.

PERRY EQUIPMENT CORPORATION
1407 N. SIXTH ST., PHILADELPHIA 22, PA.
Phone: POplar 3-3505

ECH SPECIALS

Abbe 5′x6′ J'ktd. Ball Mill, chr. mang. steel. Sturtevant 1 ton #3 Blender, 7′ drum. Rotex 40″x84″ Sifter, #42, Db. sep, 1 HP. Day #4 Gearless 80 gal. Pony Mixer, 10 HP. Pfaudler 1500 gal. Glass Tank: closed top. Gruendler "BB" Whirlbeater Hammer Mill. BP Jktd. Mixer, 100 gal. w'k'g. cored arms. Robinson 70 cu. ft. jktd. mixer with motor. 4 Mikro's-Bantam, #1SI, #2SI, #4 w/mtrs.

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3—RIBBON BLENDERS, 2500 gallons Roller Bearings Stuffing Boxes.

1—BALL MILL 5 x 6 Jacketed.

4—NICKEL KETTLES, 500 gallons, Agitated, Jacketed.

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EQUIPONOMICS

HOMOGENIZER — Manton Gaulin, S.S Model 500E, 500 GPH, 5000 PSI.

OLIVER VACUUM FILTER—S.S. 316. 3′ x 6′ Complete (1954).
CENTRIFUGES—Tolhurst 26″ Monel, Susp.
FILTER PRESS—Shriver 36″ x 36″—34-1½″ Rubber Covered Frames.
HARDINGE Conical Ball Mill, 4½′ x 16′.
SIFTERS—Rotex 2 deck, 40″ x 60″; 5 deck, 40″ x 120″; 20″ x 48″, 2 Deck.
EVAPORATOR—Single effect, S.S. VRC, 250 sq. ft., Blaw Knox 1953. Complete.
BLENDERS—400#, 1250#, 3000#.
KETTLE—S.S. jack. 900 gal. ASME 125 PSI.
HEAT EXCHANGER—S.S. 500 sq. ft., single pass.
3 H.P. S.S. HOMO MIXER XP.

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4—Baker Perkins & W & P 200 gal. Jktd., sigma blade Shredders—$1650.00 ea.
2—Ball & Jewell #2 Cutters with 75 H.P. motors—$2750.00 ea.
4—Link-Belt Vibrating Screens 4′ x 8′ — $1050.00 ea.
1—Jeffrey Vibrating Conveyor.
2—30″ Sperry Filters, closed del., 3-eye, 39-plates, 40-frames—$1950.00 ea.
1—42″ Sperry Filter 40-plates, 41-frames, hyd. closing, open del.—$2500.
9—Blackburn Smith Pressure Leaf Filters with S.S. Leaves.
1—International Ball Mill, porcelain lined, 48″ x 60″, 15 H.P. Unibrake Motor, 2-drums balls. Like new—$3200.
1—Schutz-O'Neill Pulverizer 22″, Style D.
1—Sparkler Filter 18″ dia., 7-plates, 316 Stainless-steam jacketed.
1—Sparkler Filter 33-S-28 with Scavenger Plate, steam jacketed, and extra plates.
1—2 qt. Sigma Blade S.S. Mixer.
1—250 gal. Kettle, nickel jacket, 100#.
2—Axial Flow Fans with 7-½ H.P. motors —$750.00 ea.
1—430 S.S. Tank 3000 gal. vert. ⅜ plate, with 2 pc. cover.
2—Vacuum Pumps, Gardner-Denver, 5″ bore 4″ stroke, with 7-½ H.P. motors.
1—#316 S.S. Reactor 265 gal. jkt.
2—Twin Screw Mixers 120 gal. jkt.
2—Aetna Water Stills 20 gph, stainless steel —new.

We have many other items too numerous to mention. Advise us as to your requirements.

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CENTRIFUGES—Sharples #3 Stainless. Also #6.
DRYERS—Allright Nell 4′ x 9′ Atmos. Drum Dryer. Also Rotary Dryers. Buffalo Vac Drum Dryer 24″ x 20″. Devine 8 shelf Vac Dryer 38′ x 42″.
FILLERS—Powder & Liquid. Also Labelers.
FILTERS—Vallez type 49, with 41 Stainless covered leaves. #2 Sweetland 12 Stainless covered leaves. Ertel 6″ & 10″ Disc type.
FILTER PRESSES—6″ to 36″ Iron & Wood.
KETTLES—Stainless Jack. 20 to 500 gals. Dopp 350 gal. Cast Iron Jack. Vacuum. Devine Impreg. Units 30″ & 36″ dia. Steel, Alum. & Copper 5 to 2,000 gals.
MILLS—Raymond #00 Pulverizer 30 HP complete. Also #0000. Mikro Pulverizer #4, 2S1, 2TH, 1SH, Hammer Mills & Pulverizers 3 to 50 HP. Williams #BB, #3 & #2XX Hammer Mills. Ball & Jewell #2 Rotary Cutters. Spr. Wald, Stainless Spike Crusher. Pebble, Jar & Ball Mills, Lab. to 6′ x 9′. 3 Roll, 9″ x 32″, 12″ x 30″, 16″ x 40″ Lehmann 4 Roll W. C. 12″ x 36″ Steel
MIXERS—Baker Perkins 100 gal. Jack. Day Imperial 75 & 150 gal. Change Can Mixers 8, 15 & 40. Day Jumbo 700 gal. horiz. Mixer. Blystone 3000# horiz. spiral Mixer. Sturtev. 1 ton Drum Blender 10 HP. Day 1000# horiz. Dry Spiral Mixer. Dry Spiral Mixers 50 to 3000#. Lancaster 6′ dia. 25 HP & #1, 3 HP.
PUMPS—Vacuum 10 to 500 CFM. Gould 75 HP Centrifugal 250 PSI.
SIFTERS—Day, Robinson etc.
SOAP MACHINERY—Toilet, Laundry, etc.
TABLET MACHINES—Stokes Rotary BB2, RDS3 & RD3. Single punch to 3″.
TANKS—Stainless, Gl. Lined, Steel.
MISC.—Boilers Gas & Oil. Conveyors.

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100 gal S/S jktd Kettle, clamped cover.
Stokes Model RD3 rotary Tablet Press.
Colton Model 216 rotary Tablet Press.
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Stainless 1 cu. ft. Conical Blender.
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MILLS—PEBBLE—15-½ Gal jar-100 Gal. 34x38-110 Gal. 36x36-120 Gal. 36x42-211 Gal. 4′x5′-597 Gal. 6′x5′,-1000 Gal. 6′x8′ porcelain lined w/motors.

SCREENS—20″ Coombs Gyratory-12″x72″ Lo-Veyor (S/S)-20″x84″ Rotex triple-40x84 Rotex double-3x5 & 3x10 Tyler double.

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LIBERTY 9-0245

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2—Sweco 48" SS separators, Model D-2D-8.

1—Tolhurst center slung 40" rubber covered centrifuge, perforate basket, with motor.

1—Tolhurst SS 20" suspended type centrifuge perforate basket.

1—AT&M SS 18" suspended type centrifuge imperforate basket.

1—AT&M 48" SS suspended type centrifuge imperforate basket.

1—Baker Perkins Size 6, SS, 2¼ gal. double arm jacketed vacuum mixer, complete.

1—Baker Perkins Size 16 Type UUEM, 150 gal. double arm jacketed dispersion mixer with 100 HP motor.

1—Glen 340 qt. mixer.

12—Robinson SS horizontal ribbon blender, 255 cu. ft.

1—Patterson sigma blade SS jacketed vacuum mixer, 500 gal.

1—Sprout Waldron Model 501-D pelleter with SS contact parts.

2—Sturtevant #7 SS dust type rotary batch blenders, NEW.

1—Readco jacketed 1000# ribbon blender.

1—Pfaudler Series R 500 gal. glass lined jacketed reactor, complete with agitator and drive.

1—Pfaudler Series ELL 500 gal. jacketed reactor, complete with agitator and drive.

3—Pfaudler 200 gal. glass lined jacketed reactor with impeller type agitators and drives.

2—3000 gallon stainless steel vertical storage tanks.

4—Stokes Model 138J-20 single door vacuum shelf dryers, 20 shelves.

1—Stokes SS jacketed rotary vacuum dryer, 2'x6'.

1—Buflovak stainless steel jacketed rotary vacuum dryer, 3'x15'.

1—Stokes Model 59DS rotary vacuum dryer, 5'x30'.

2—Louisville stainless steel rotary dryers, 8'x50'.

1—Shriver cast iron P & F 36"x 36" closed delivery 4 eye filter press, 60 chambers.

1—Niagara stainless steel filter, Model 510-28.

1—Sparkler stainless steel filter, Model 14-D-4.

1—Swenson type 316 SS vacuum crystallizer, 3'6"x12'.

1—Swenson type 316 SS vacuum crystallizer, 2'x12'.

15—Davis Engineers heat exchangers, 145 sq. ft., NEW.

2—Badger type 316 SS condensers 500 and 600 sq. ft.

1—Downington SS heat exchanger, 750 sq. ft.

4—Package steam generators, 50, 80, 300 and 500 HP.

1—Process Engineers SS jacketed kettle, 1500 gal, 140# working pressure jacket, 150# working pressure shell.

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1—Stokes DD-2 Rotary Tablet Press.
7—Stokes "E" & "F" Single Punch Presses.
1—Stokes "R" Single Punch Press.
1—Stokes 43A Granulator w/motor.
1—Fletcher 30" Type 316 S.S. Sus. Centrifugal.
1—B.P. 4AN2 Jack. Mixer 1 Gal. w/Exp. Pf. Motor.
2—Vac. Shelf Dryers—Lab. & 6 Shelf.
1—Abbe "O" Rotary Cutter.
1—Simpson Lab. Mixer w/Motor.

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1—50 Gallon Pfaudler Open Glass Lined Jacketed Tank, 75# press.
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1—Dorr Oliver Filter, Stainless Steel.
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1—2,600,000 BTU/H Heat Exchanger, all-steel New 1957.
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1—#20 Charlotte Colloid Mill.
1—48"x34' Accumulator Tank—1300# Press., A.S.M.E.
1—Selas Gas Furnace (Ammonia Superheater).
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5—Double spiral ribbon blenders 400, 1000, 1200, 2000, 7000#.
3—Pfaudler glass lined jacketed and agitated reactors 1000, 500, 20 gallons.
4—Pony mixers 8, 15, 40, 50 gallons.
2—Alsop sealed disc filters model SD-12-WR-30, stainless steel.
4—Pebble mills 250, 100, 50, 15 gallons
1—Entolator impact mill, stainless steel, 20 HP.
1—Selectro screen, stainless steel, 2' x 7'
2—Steel ball mills 250, 50 gallons.
2—Stokes rotary vacuum dryers 18" x 42", 2½' x 8'.
2—Vacuum shelf dryers 40" x 43"—17 shelf, 24" x 24"—1 shelf, stainless steel.
1—Oliver rotary vacuum filter 1' x 1', stainless steel.

Write or Phone Your Inquiries

chemical & process machinery corp.
52 Ninth St. Brooklyn 15, N.Y. HYacinth 9-7200

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Fletcher 30" Susp. S.S. 10/5 H.P. Centrifuge vaportite.
Fletcher 40" Suspended Steel Centrifuge
Oliver 5'3" x 3' Stainless Precoat Filters.
2350 gal. 304 SS Tank.
Nooter 750 gal. Steel Reactor 300 PSI.
8' x 96' P&S Conveyor Dryer Stainless.
Link Belt 502-16 Roto-Louvre Dryer.
Vulcan 9' x 100' Rotary Kiln.
8' x 80' Rotary Dryer 316 SS.
5' x 45' Rotary Dryer.
Mosser 4' x 47' Rotary Dryers.
Louisville 6' x 50' Steam Tube Dryer.
Raymond #5448 High Side Mill.
Micro 2TH Pulverizer.
Condensers-Heat Exchangers 100 to 5000 sq. ft. Stainless Steel, Steel, Admiralty.
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Schering Head Slams Hard at Government's Charges of Profiteering

—Continued from page 3

broken down to show the error in the 1,118 percent profit charge.

"Schering does not operate on the basis of marking up compounds uniformly so many times over so-called bare factory cost," the witness explained. "There are many variable factors, such as the size of the market, the uncertainty of product life, the expense of develoiping and marketing, the cost of continued research, the cost of informing the medical profession . . ."

Defending the reasonableness of Schering prices of corticosteroids, Mr. Brown said that undoubtedly some people find it difficult to pay for needed medication, but they also have difficulty in meeting their rent and food bills as well.

Suggests Aid for Needy

What is needed, he said, is some means by which the incomes of the people can be raised, and suggested the creation of a citizens' advisory committee to work with welfare representatives where businessmen from the basic necessity industries such as food, housing and drugs, can offer their assistance in resolving this social problem.

"We are doing this for the underprivileged or under-developed countries—why not help our own underprivilged people?"

Evidence put into the record by the committee showed that Schering, one of the three big makers of cortisone and its derivatives, made a major break-through in 1954 with the development of prednisone and prednisolone. It markets the former under the trade name of "Meticorten" and the latter under "Meticortelone." They are used chiefly in the treatment of arthritis.

At the outset of his testimony, Mr. Brown read a prepared statement describing Schering's interest in the steroids and its research work that led to the development of prednisone and prednisolone. However, other companies had researched in the area and informed Schering they intended to market these products and had filed or were filing conflicting patent claims based on their own research.

He said Schering could not determine who had priority and entered into cross-licenses with these companies individually, after separate negotiations with them. These were Merck & Co.; Upjohn Company; Chas. Pfizer & Co.; Parke, Davis & Co., and Ciba Pharmaceutical Products, Inc. Each of these companies was then selling cortisone or hydrocortisone.

Right to Market Insured

This cross-licensing arrangement, similar to the one involving cortisone, insured the continued right of each company to market the new compounds, regardless of who received the patent from the Patent Office, but in no way affected the Patent Office procedure, Mr. Brown explained.

Committee investigators, however, charged that these agreements were not the same as licensing agreements made under the patent laws and could not be considered as such because no patent had been issued on the drug.

Irene Till, economist on the committee, testified that each of the agreements, with the exception of the agreement with Upjohn, contained a clause that drugs were to be sold in "specialty form only."

Under the agreements, the companies were to pay royalties to Schering for three years after which Schering, if it failed to get the patent, would pay royalties to the company that obtained the patent.

Earlier, in 1950, she said, the Mexican firm Syntex, had "hit on prednisone or something like it" and received a patent on it in 1951. When Schering came out in 1955 with prednisolone, Syntex was uncertain of its patent position and approached Schering for a license.

No License, Only Letter

Mr. Brown testified under questioning that no license was issued but there was a letter agreement between the two firms under which Syntex continued to market its product in bulk form. A suit brought meanwhile by Syntex charging infringement of its patent, was settled out of court in 1958 by Merck and Schering.

Mr. Brown insisted the suit had no connection with prednisolone but involved a technicality since the description of the Mexican product was "prednisone or something like it."

Sen. Alexander Wiley of Wisconsin wanted to know the basis for charging royalties if there was no patent issued to Schering at the time the cross-licensing agreements were made. Mr. Brown explained that Schering had an invention and the other companies "came to us and said they wanted licenses."

The validity of such license agreements in the absence of a patent issued by the Patent Office was vigorously challenged by committee counsel Dixon and by Sen. Kefauver. They contended that such agreements were restrictive in nature because they provided for sale by the licenses of the drugs in "specialty form only" and were of doubtful validity under the antitrust laws.

Mr. Brown denied that such was the case. He said that these were not restrictive agreements because they did not prohibit sales in bulk. They were made simply in anticipation of issuance of a patent so as to make it possible to start marketing the drugs without waiting out the long period of patent examinations, interference procedures, etc.

'Fortune' Article Involved

Irving Jurow, vice-president and general counsel for Schering, was drawn into the controversy over the agreements by the committee referring to a quotation credited to him in *Fortune* magazine. He was quoted as saying that a license agreement was refused Syntex because "they are a bulk supplier" and because "they have the reputation of knocking the pants off prices."

He denied the quotation saying that it was only partly correct and was not in context with the matter discussed with the reporter at the time.

Sen. Kefauver asked: "As a lawyer, isn't an effort to restrict sales of a product on which no patent is issued a clear cut violation of the law? The entering into agreements trying to restrict the distribution of products and collect royalties on something that doesn't have a patent, isn't that a clear violation of the antitrust law?"

Mr. Jerow replied with an emphatic "no, sir." He added that you get a royalty for licensing an invention—you don't have to have a patent to collect a royalty; you can license a trade secret. There is no reason, he said, why you can't license and collect a royalty on something on which you might get a patent in the future.

Mr. Dixon inquired: "You don't think you were restricting the orderly marketing of these products then?"

Mr. Jurow replied: "I certainly do not."

Mr. Brown interjected: "On the contrary, it aided the orderly marketing of the products."

Mr. Jurow added that he interpreted the word "only" as a limitation on the scope of the license after the issuance of the patent.

"You buy fire insurance before a fire," he remarked tersely.

Committee Accused of Prying

Several times the discussions between Mr. Brown and the committee became heated with Mr. Brown accusing the committee of prying into his personal affairs and questioning whether the committee was not exceeding its authority.

He protested that he had no advance notion of the kind of questions that would be asked of him.

He said that if he had thought that the committee would be endeavoring to determine whether Schering had violated the antitrust laws, he would have been prepared to make a defense with counsel, and the filing of briefs. He protested having been forced to sit before the committee for five hours under the bright lights of television and facing about twenty people at the committee table. He said he had been placed at a disadvantage and was unprepared to debate the questions being asked.

Sen. Kefauver said he was sorry if Mr. Brown was placed at a disadvantage, but insisted that the questions were to determine whether the agreements were restrictive in nature and whether they tended to force prices to unreasonable high levels. He said that the committee was not trying a case, but it was pertinent to its work to determine why drug prices "are so high."

Sen. Kefauver Shows His Hand

—Continued from page 3

only." Committee charges that these arrangements are restrictive and not patent-licensing pacts, in violation of the antitrust laws, has drawn the attention of the Department of Justice and it is now looking into these accords.

Reports were also current in the jam-packed, spacious hearing room that the Department of Justice, though stung by the dismissal of its antitrust suit against the Salk polio vaccine manufacturers in the so-called Trenton decision ten days ago (OPD, 12/7/59), is considering going after the industry again from a new angle.

Justice Studying New Authority

The department is studying the possible use of new authority granted several years ago in civil antitrust actions. This would let the government go into court and demand damages from the vaccine manufacturers for alleged overcharges on the vaccine purchased during the early days of the national polio immunization campaign.

The trend of committee probing into the operations of the drug industry generally has been in the direction of showing up the big producers in their worst light.

Much has been made by Sen. Estes Kefauver of Tennessee, committee counsel Paul Rand Dixon and committee economist Dr. John Blair of the comparatively high list prices of the big producers for their corticosteroid costs to druggists and the low prices offered by small competitors.

Attempts by the industry to defend the spread by pointing to the heavy investment it makes in research, and the high cost of personally contacting doctors and druggists to explain the value of the new products are turned aside by the committee with such pointed remarks as: "I still can't understand why your prices are so high and this firm's prices are so low. Why can't you give the public a break,"

Committee Seeks to Bolster Case

The committee sought during the week to bolster its case against the drug producers with testimony from small suppliers of corticosteroids, representatives of the Arthritis & Rheumatism Foundation and by the head of the Division of Clinical Pharmacology of John Hopkins University's School of Medicine, Dr. Louis Lasagna.

Industry was barred from offering any explanation as to why doctors prefer drugs of the big, established firms over those of smaller suppliers until the week's investigation neared an end.

The complaint aired before the committee by the Arthritis & Rheumatism Foundation was directed not at the ethical drug manufacturers but at suppliers of patent medicines who "take a quarter of a billion dollars a year from 5 million arthritics" with false promises of relief or cure.

Dr. E. D. Bransome, chairman of the board of the New York State chapter of the foundation, submitted six recommendations to the committee aimed at making such manufacturers prove the effectiveness of their products before they can be marketed.

Promotional activities of the big companies came in for attack toward the end of the week from Dr. Lasagna who termed "improper" some of the claims made by Merck & Co. about a new steroid hormone drug known as "Decadron."

He used the brochures to make a sweeping indictment of the industry accusing the drug firms of "selling bushelfuls of sows' ears for silk purses every year" in their advertising and promotional literature.

Lasagna Challenged

Nobel Prize winner Dr. Philip Hench, professor of medicine at the Mayo Foundation, vigorously challenged Dr. Lasagna's qualifications as "an expert of the sort needed by this hearing." He added that he saw nothing objectionable in Merck's advertising.

At one point during the hearing the committee broke into the testimony of John T. Connor, president of Merck, to call Dr. Philip Berke, vice-president of Formet Laboratories, of Roselle, N. J., for the small business man's point of view on steroid drug manufacture.

Dr. Berke told the committee that with an investment of $5 million in production facilities he could produce all the steroids needed in the world. He said that he never applied for a license to sell prednisolone because he would not expect to get one. Formet is producing and selling the drug, he added, because the Patent Office has not yet acted on the patent application of Schering Corporation, which is being disputed by other big producers of the drug.

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